ANNED

072977-00002



Minutes of Meeting Held April 24, 2001

Company: ETI, H2O, Inc.

Route 14 Box 1517

Lake City, FL 32024

Products: Axen

EPA File Symbol 72977-E

Axenohl

EPA File Symbol 72977-R

Attendees: Company representatives: Andrew B. Arata, Mitch Cohen, and

Edwin A. Woolson and Henry Jacoby consultants.

EPA representatives: Nancy Whyte, Alex Traska, Martha Terry, and Marshall Swindell

The meeting centered on the deficiencies noted in the last agency letter to the company for both products (an EPA letter dated 3/15 /01).

- 1. After significant discussion of the applications and the preliminary efficacy data on citric acid, it was determined that citric acid will be declared as an active ingredient. The preliminary data showed that citric acid did show from a 42% 64% reduction of microorganisms in the percent reduction test conducted by the company (this data was submitted for informational purposes only, and was not officially reviewed by EPA, nor received a MRID number).
- 2. The company is using the Selective method of support and will submit a new "Certification With Respect to Citation of Data Form" listing both silver and citric acid as the active ingredients.
- 3. The company will submit a new data matrix for each product formulation, for technical silver and for technical citric acid. A registration standard has been issued for both silver and citric acid. Most of the data in both standards have been waived or satisfied by use of public literature data.
- 4. The company will submit a "Certificate of Analysis," and a Material Safety Data Sheet (if available) for the technical silver and citric acid.

- 5. The company has submitted five acceptable acute toxicity data on the Axenohl (0.24% silver, and 20% citric acid formula); however, no acute inhalation study or data waiver request has been submitted. The company will submit a waiver request for the inhalation data requirement after discussing the content of the waiver with AD's toxicologist. *[consult with Wallace to see if the data on the Axenohl can be used for the Axen formula???]*
- 6. The efficacy use dilution study (MRID# 45016906) will be placed into review ASAP. Nancy Whyte indicated that she would be will to conduct the review if the package is assigned to her. The data on Enterococcus which was previously reviewed and found to be unacceptable will not be used for these products.
- 7. The company will submit a new Confidential Statement of Formula form for each product declaring citric acid as an active ingredient.
- 8. The company will submit new labeling for each product. The new labeling will drop all virucidal claims; declare citric acid as an active ingredient; include appropriate First Aid instructions in accordance with PR Notice 2001-1; delete any reference to use of the product on textiles or other surfaces which are not environmental, hard and nonporous in nature.
 - 9. The company will submit a letter designating Henry Jacoby as their new agent.

For any questions or inquiries, please contact Martha Terry at 703-308-6217 or Marshall Swindell at 703-308-6341.

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Dolana Blount ETI 1725 Gillespie Way El Cahon, CA 92020

Subject:

EPA Reg. No. 72977-2

Axen

Notification Dated 3/2/04

The notification referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, to expand and clarify the current pre-cleaning statement, "Surfaces that are heavily soiled with organic matter must be pre-cleaned prior to using this product", to the following, "Prior to application, thoroughly clean all surfaces to be treated with an acceptable cleaner or detergent", is acceptable.

Your notification has been made a part of the permanent records for this file.

If you have any questions about the comments in this letter, please feel free to contact Tony Kish at 703-308-9443, or myself at 703-308-6341.

Sincerely

Marshafi Swindels,

Product Manager Team 33,

Regulatory Management Branch I Antimicrobials Division (7510C)

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Front Panel Axen EPA File Symbol 72977-2 revision March 10, 2004

AXEN®

Stabilized Ionic Silver Hard Surface Disinfectant

Active Ingredient

Silver*
Citric Acid
Other Ingredients

45 7 3 5 4

0.0012% 4.8400% 95.1588%

Total 100.0000%

* Electrolytically generated Silver ions

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-2 EPA EST. No. xxxxx-x-xx Manufactured by ETI $\rm H_2O$, 1725 Gillespie Way El Cajon, CA 92020

Net Vol. XX oz.

Back Panel
Axen
EPA File Symbol 72977-2
Revised March 10, 2004

AXEN[®] Disinfectant Pump Spray kills bacteria on environmental hard surfaces (painted, glazed tile, plastic, metal, glass, glazed porcelain) in your home and public places. It eliminates odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN[®] Disinfectant Pump Spray:

In empty garbage cans
In pet areas
In sick rooms
Under sinks

In diaper pails
In empty hampers
On doorknobs
In bathrooms

Fast/Easy/Effective: AXEN® Disinfectant is effective against Salmonella chloeraesuis, Staphylococcus aureus, and Pseudomonas aeruginosa organisms. Use anywhere in the home, public places, or boats and vehicles where there are finished surfaces (painted, glazed tile, plastic, metal, glass, glazed porcelain). These include areas such as the laundry room, recreation room, kitchen, bedrooms, closets, bathroom, attic and work areas. Interiors of boats and recreational vehicles, AXEN® Disinfectant can be used in such areas as the bathroom, kitchen and anywhere there is a finished surfaces. AXEN® Disinfectant can be used to disinfectant recycling bins, diaper pails, garbage cans and other hard surface containers.

Directions for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

Prior to application, thoroughly clean all surfaces to be treated with an acceptable cleaner or detergent. For disinfecting, the surface must be completely wet with AXEN® Disinfectant for 10 minutes. The surface may then be wiped dry with a clean unused towel.

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5. Date

March 2, 2004

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Dolana Blount

Front Panel Axen EPA File Symbol 72977-2 revision March 2, 2004

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Hard Surface Disinfectant

Active Ingredient

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Citric Acid

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CAUTION

EPA REG. No. 72977-2

EPA EST. No. xxxxx+x+xx

Manufactured by ETI H_2O ,

1725 Gillespie Way El Cajon, CA 92020

Net Vol. XX oz.

Back Panel Axen EPA File Symbol 72977-2 Revised March 2, 2004

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Directions for Use

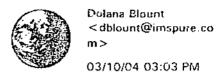
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

Prior to application, thoroughly clean all surfaces to be treated. For disinfecting, the surface must be completely wet with **AXEN®** Disinfectant for 10 minutes. The surface may then be wiped dry with a clean unused towel.

STORAGE AND DISPOSAL

Storage Do not contaminate water, food or feed by storage or disposal.

Disposal Do not reuse container. Rinse thoroughly before discarding in trash or recycling.



To: Tony Kish/DC/USEPA/US@EPA cc: rhhanson@bresnan.net

Subject: EPA Reg# 72977-2

March 10, 2004

Re:

Axen, EPA Reg# 72977-2

Notification of other labeling revisions per PR Notice 98-10

Mr. Kish:

Attached per our conversation today is the revised label for our product Axen (EPA Reg# 72977-2). Please replace the label dated March 2, 2004 with the attached label dated March 10, 2004. As requested, I have highlighted the revised pre-cleaning instructions.

Thank you for your assistance. If you need any further information, please contact me directly.

Best Regards, Dolana

<?xml:namespace prefix = stl ns = "urn:schemas-microsoft-com:office:smarttags" />Dolana
Blount

ETI H2O

DBlount@imspure.com 619.596.8600, ext. 105

This message is intended for the sole use of the intended recipient. The message and any files transmitted with it may contain material that is confidential and/or legally privileged. Any review, reliance or distribution by others or forwarding without express permission is strictly prohibited. If you are not the intended recipient, please contact the sender and delete all copies and attachments.

031004 Modified Axen Label for E

March 2, 2004

Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Room 266A, Crystal Mall 2
1921 Jefferson Davis Highway
Arfington, VA 22202-4501

Attention: Marshall Swindell (PM 33)

Re: Axen, EPA Reg. No. 72977-2

Notification of other labeling revisions per PR Notice 98-10

Dear Mr. Swindell:

As referenced above, we are notifying for clarification of pre-cleaning instructions for "Axen". Upon review of our label by the California Department of Pesticide Registration, we were informed that CDPR did not feel our pre-cleaning statement was not clear for the user. We are making this revision in an effort to more clearly instruct the user of this product of the pre-cleaning step and to satisfy the CDPR for registration purposes. This submission is in full compliance with the notification procedure as identified in PR Notice 98-10.

As required by PR Notice 98-10 for notifications for other labeling revisions, enclosed please find the following:

Application Form 8570-1, including the PR Notice 98-10 Certification Statement

One copy of the product labeling with the changes highlighted.

Please let me know if you have any questions about the enclosed items.

Best Regards,

ETI H2Q

Dolana Blount

Regulatory Director

| ONLINED STATES |
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U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (H7505C)

401 TMT St., S.W.

Washington, D.C. 20460

EPA Reg. Number.

72977-2

Date of Issuance:

JUN 26 2001

NOTICE OF PESTICIDE:

x Registration

___ Reregistration

(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

Axen

Name and Address of Registrant (include ZIP Code):

ETI H,O Route 14, Box 1517-Lake City, FL 32054

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a posticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to excusive use of the name or to its use if it has been covered by

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
 - 2. Make the following label changes:
 - Revise the EPA Registration Number to read, "EPA Reg. No. "72977-2".

Signature of Approving Official: Marshall Swindell, PM 33 7 Regulatory Management Branch 1 Antimicrobial Division (7510C)

JUN 26 2001

EPA Form 8570-6

Page 2 EPA Registration No. 72977-2

b. Submit two copies of the revised final printed label for the records.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

142 150

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,

Marshall Swindell

Product Manager 33

Regulatory Management Branch 1 Antimicrobial Division (7510C)

Enclosure

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FEB 1-1 2003 RESPONSE DATE

Garrison Dental Solutions Attn: Kevin Walburg 110DeWitt Lane Spring Lake, MI 49456 INNOVATIVE

M E D I C A L S E R V I C E S

Dear Mr. Walburg:

This letter is in response to your offer to pay for the use of our data to support the registration of your H2ProT product with the US EPA.

As a matter of policy, ETI H2O, a division of Innovative Medical Services, does not permit the use of data submitted to the US EPA in support of a registration, but will consider an offer of compensation for data that is not considered Confidential Business Information.

Our data was not generated specifically for silver. All data generated was on the formulated products containing ionic silver as one active ingredient.

ETI H2O is the original data submitter for the technical grade product Axenohl (72977-1) and the formulated end use product Axen (72977-2); thus, the "exclusive use" provisions under FIFRA section 3 (c) (1) (F) protect this data.

ETI H2O believes that OUR product specific data iS inappropriate for support of your product; however, if you feel the data may be useful, please contact me for further discussion.

Without additional correspondence, Innovative Medical Services withholds permission for the use of our data under the "exclusive use" provisions of FIFRA.

Please contact Dolana Blount at 619-596-8600 ext. 105 if you wish to discuss.

Sincerely,

INNOVATIVE MEDIGAL SERVICES

Gene Auerbach

Chief Operating Officer

Cc: Marshall Swindell, PM335

US EPA, Regulatory Management Branch

Antimicrobial Division (7510C)

SUBMISSION BAR CODE &S617433 REVIEWER KLOWY -114" CONTING FORM FOR APPLICATIONS FOR REGISTRATION/AMENDMENTS FILE SYMBOL/REG NO. 21977-21 PM 3.3 ACTION CODE 300 DESCRIPTOR Bold Sed request l non-residential use only) NOT APPLICABLE [] CONDITIONAL REGISTRATION TYPE:] UNCONDITIONAL [] GENERAL] RESTRICTED USE PROPOSED CLASSIFICATION: EPA RECEIVE DATE TPM RECEIVE DATE. DATE ON APPLICATION METROD OF SUPPORT TORMULATORS EXEMPTION - CITE-ALL [] SUBMITTED _NOT_SUBMITTED) NOT SUBMITTED] NOT APPLICABLE. NOT APPLICABLE } INCORRECT/RESUB* INCORRECT/RESUB REVIEW(S) REQUESTED DATA DATE DUE DATE -PACK # SENT-DATE RETURNED CHEMISTRY EFFICACY TOXICOLOGY · HED TOX. ENVIRON. FATE FISH/WILDLIFE OTHER STATES

- 3 E - EDOS 25406535

RESPONSE DATE 6/24/02/



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

June 24th, 2002

I, Marshall Swindell, Product Manager 33, Regulatory Management Branch I, Antimicrobials Division, Office of Pesticide Programs, Office of Prevention, Pesticides, and Toxic Substances, United States Environmental Protection Agency (EPA), certify that the pesticide product listed below is, as of the date of this letter, a registered product under the Federal Insecticide. Fungicidé, and Rodenticide Act(FIFRA), as amended, and that as such, the product may be sold and marketed in the United States of America, as authorized and limited by FIFRA. A true and correct copy of the products label(s) approved by EPA is (are) attached and should accompany this letter.

Registration of this product with EPA also denotes that the registrant listed below is responsible for ensuring full compliance with all laws of the United States of America, or governing jurisdiction, regarding the purchase, sale, application, use, storage, and/or storage and/or disposal of this product.

Further, the recipient of this letter is on notice that the status of the referenced registration and/or the accompanying label may change subsequent to the date of this letter. EPA assumes no responsibility to notify the recipient of this letter of any change in the status of the registration(s) and/or the product label(s) for the product(s) listed below. EPA assumes no responsibility to notify the recipient of this letter of any changes in status of the registration and/or product label for the product listed below.

EPA has issued a registration number for the product(s) listed below to:

ETI H2O

1725 Gillespie Way El Cajon, CA 92020

EDA Decistration Number(s):

EPA Registration Number(s): 72977-2

Name(s) of Product(s): Axen

Marshall Swindell

Product Manager 33

Regulatory Management Branch I Antimicrobial Division(7510C) Front Panel Axen EPA File Symbol 72977-E revision June 21, 2001

AXEN®

Stabilized Tonic Silver Hard Surface Disinfectant

Active Ingredient
Silver*
Citric Acid
Other Ingredients

0.0012% 4.8400% 95.1588%

Total 100.0000%

* Electrolytically generated Silver ions

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-E

EPA EST. No. xxxxx-x-xx

Manufactured by ETI H.O.

Route 14, P. O. Box1517 Lake City, FL 32024

Net Vol. 36 oz.

ACCEPTED with COMMENTS in EPA Letter Dated:

JUN 2 6 2001

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide. Tegislered under EPA Reg. No.

72977-2

Back Panel Axen
EPA File Symbol 72977-E
Revised June 21, 2001

AXEN® Disinfectant Pump Spray kills bacteria on environmental hard surfaces (painted, glazed tile, plastic, metal, glass, glazed porcelain) in your home and public places. It eliminates odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN® Disinfectant Pump Spray:

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STORAGE AND DISPOSAL

Storage Do not contaminate water, food or feed by storage or disposal.

Disposal Do not reuse container. Rinse thoroughly before discarding in trash or recycling.

ACCEPTED
with COMMENTS
in EPA Lener Dated:
JUN 2 6 2001

1

Under the Federal Insecticide, Pungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 72977-2

FAX COVER



THIS MESSAGE IS INTENDED ONLY FOR RECEPTION BY THE INDIVIDUAL OR ENTITY TO WHOM IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVELEGED, CONFIDENTIAL OR REQULATED IN DISCLOSURE UNDER STATE AND FEDERAL LAWS. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE (COLLECT, IF NECESSARY) AND RETURN THE ORIGINAL COMMUNICATION TO US AT THE ADDRESS BELOW VIA THE US POSTAL SERVICE. THANK YOU.

| | | DATE: | 06.18. |
|-------|--|-------|--------|
| TO; | Marshall Swindell | | • • |
| | EPA | :
 | • |
| FAX: | 703.308.0481 | | |
| FROM: | Dolana Blount | | |
| | ETI H2O
PHONE: (619) 596-8600 Ext. 105
FAX: (619) 596-8700 | | |

MESSAGE:

Please airect this fax to Mr. Swindell. Thank-you-Dolana

Page I of

VIA FACSIMILE 703-308-8491



June 18, 2002

Marshall Swindell
Product Manager 33, Antimicrobial Division
US EPA
Washington, D.C.

Dear Mr. Swindell:

ETI H2O is requesting two certified letters in reference to our registered products, Axen (72977-2) and Axenohl (72977-1). Please address the first letter to IMS Korea, 3F, Nonhyun-Dong, Kangnam-Ku, Seoul Korea, and the second letter to Innovative Medical Services, 1725 Gillespie Way, El Cajon, CA 92020.

Please send the letters via federal express to our offices at 1725 Gillespie Way, El Cajon, CA 92020. Our Federal Express number is 1626-3497-6.

Should you have any questions, or require additional information, please do not hesitate to contact me directly.

Thank you, ETI H2Ø

Dolaria Blount

Assistant to the President

SUBMISSION BAR CODE & S 6 1/088 REVIEWER M CODING FORM FOR APPLICATIONS FOR REGISTRATION/AMENDMENTS FILE SYMBOL/REG NO. 71977-2 PM 33 ACTION CODE 345 | | CHILD RESISTANT PACKAGING: [] CERTIFICATION ---) NON-RESIDENTIAL USE ONLY 1 NOT APPLICABLE REGISTRATION TYPE: [] CONDITIONAL [] UNCONDITIONAL [] GENERAL PROPOSED CLASSIFICATION:) RESTRICTED USE DATE ON APPLICATION EPA RECEIVE DATE TPM RECEIVE DATE-METHOD OF SUPPORT FORMULATORS: EXEMPTION [_] SUBMITTED [-] CITE-ALL [] NOT SUBMITTED] SELECTIVE . NOT SUBMITTED] NOT APPLICABLE. NOT APPLICABLE] INCORRECT/RESUB INCORRECT/RESUB-REVIEW(S) REQUESTED DATA DUE DATE PACK # SENT-DATE RETURNED CHEMISTRY EFFICACY TOXICOLOGY · HED TOX. ENVIRON. FATE FISH/WILDLIFE

PERPONSE CODE 17

PRESPONSE DATE

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APR 2 6 2002

ETI H2O Inc. Route 14, P.O. Box 1517 Lake City, FL 32024

U.S. AGENT: Henry Jacoby 6709 Ilex Court New Market, MD 21774

Subject: Axenohl

EPA Registration No. 72977-1 Letter Dated March 4, 2002

Axen
EPA Registration NO. 72977-2
Letter Dated February 11, 2002

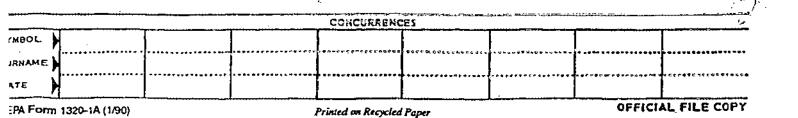
The Agency is in receipt of your submitted final Storage Stability Study in support of the above EPA Registrations under MRID #456232-01. This study was reviewed and found be acceptable. This completes the data requirements for these product registrations.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,

Marshall Swindell Product Manager 33

Regulatory Management Branch 1 Antimicrobial Division (7510C)



HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 PHONE: 301-865-9090

FAX: 301-

865-4333

February 11, 2002

Document Processing Desk (AMEND)
Office of Pesticide Programs (H7507C)
Environmental Protection Agency
Antimicrobial Division
Mr. Marshall Swindell
Ariel Rios Building
1200 Pennsylvania Ave.
Washington, D.C. 20460

Dear Marshall:

Re: SUBMISSION OF Storage Stability Study.
Axen, EPA Reg. NO. 72977-2
ETI H₂O, INC.

ETI H,O, Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please forward all correspondence relative to ETI H,O, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter transmits the final Storage Stability Study carried out with Axen under warehouse conditions.

Document Control Desk (Amend)
Office of Pesticide Programs
U. S. Environmental Protection Agency
Attn: Marshall Swindell (PM-33)
SUBMISSION OF STORAGE STABILITY STORAGE
Axen
EPA Reg. No. 72977-2

February 11, 2002 Page 2

Please consider this letter to be the transmittal document for the enclosed study. The studies enclosed are identified below:

| MRID Number | Study Citation |
|-------------|---|
| | Storage Stability Of Axenohl and Axen Under Warehouse Conditions |
| | carried out by EPL Bio-Analytical Services (EPL-BAS), 395 N. |
| | Memorial Parkway, Harristown, IL 62537, and Submitted by ETI-H20, |
| | INC., 1275 Gillespie Way, El Cajon, CA 92020. |

If you have questions regarding this application for registration, please contact me at (301) 865-9090.

Sincerely yours,

Henry/Jacoby

cc: G. Duren

HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 865-4333 PHONE: 301-865-9090

FAX: 301-

February 11, 2002

Document Processing Desk (AMEND)
Office of Pesticide Programs (H7507C)
Environmental Protection Agency
Antimicrobial Division
Mr. Marshall Swindell
Ariel Rios Building
1200 Pennsylvania Ave.
Washington, D.C. 20460

Dear Marshall:

Re: SUBMISSION OF Storage Stability Study Axen, EPA Req. NO. 72977-2 ETI H,O, INC.

100

ETI H,O, Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please forward all correspondence relative to ETI H2O, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter transmits the final Storage Stability Study carried out with Axen under warehouse conditions.

Document Cantrol Desk (Amend)
Office of Pesticide Programs
U. S. Environmental Protection Agency
Attn: Marshall Swindell (PM-33)
SUBMISSION OF STORAGE STABILITY STORAGE
Axen
EPA Reg. No. 72977-2

February 11, 2002 Page 2

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| | | INC., 1275 Gillespie Way, El Cajon, CA 92020. |

If you have questions regarding this application for registration, please contact me at (301) 865-9090.

42 15

Sincerely yours,

Henry Jagoby

cc: G. Duren

HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 865-4333 PHONE: 301-865-9090

FAX: 301-

February 11, 2002

Document Processing Desk (AMEND)
Office of Pesticide Programs (H7507C)
Environmental Protection Agency
Antimicrobial Division
Mr. Marshall Swindell
Ariel Rios Building.
1200 Pennsylvania Ave.
Washington, D.C. 20460

Dear Marshall:

Re: SUBMISSION OF Storage Stability Study Axen, EPA Req. NO. 72977-2
ETI H,o, INC.

- 1. Ch

ETI H,O, Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please forward all correspondence relative to ETI H,O, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter transmits the final Storage Stability Study carried out with Axen under warehouse conditions.

Document Control Desk (Amend)
Office of Pesticide Programs
U. S. Environmental Protection Agency
Attn: Marshall Swindell (PM-33)
SUBMISSION OF STORAGE STABILITY STORAGE
Axen
EPA Reg. No. 72977-2

February 11, 2002 Page 2

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| ĺ | · · · | Storage Stability Of Axenohl and Axen Under Warehouse Conditions |
| 1 | | carried out by EPL Bio-Analytical Services (EPL-BAS), 395 N. |
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| | | INC., 1275 Gillespie Way, El Cajon, CA 92020. |

If you have questions regarding this application for registration, please contact me at (301) 865-9090.

Sincerely yours,

Henry/Jagoby

cc: G. Duren

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OCT 1 2 2001

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Henry M. Jacoby ETI-H2O, Inc. 1725 Gillespie Way El Cajon, CA 92020

Subject: AXEN

EPA Registration Number 72977-2

Your Notification Dated October 9th, 2001 EPA Received Date October 9th, 2001

441 1 5 Km

Dear Mr. Jacoby:

The notification referred to above, submitted under the provisions of FIFRA Section 3(c)9, to add the alternate brand name "Clean Kill". Based on a review of the submitted materials, the following comments apply.

After further consideration the Agency has determined that the notification for the brand name is acceptable. This Notification Has been made part of the permanent records for this file.

If you have any questions concerning this letter, please contact Karen M. Leavy-Munk at (703)-308-6237.

Sincerely,

Marshall Swindell Product Manager 33

Regulatory Management Branch I Antimicrobial Division (7510C)

KAREN,

WOULD YOU PLEASE PULL REG# 72977-2 FROM THE FILEROOM. THE COMPANY PREVIOUSLY REQUESTED APPROVAL FOR THE ADDITIONAL BRAND NAME "CLEAN KILL", AND WE TURNED THEM DOWN.

SINCE THEN IT WAS DETERMINED THAT THE NAME HAS BEEN APPROVED FOR OTHER PRODUCTS. PLEASE SETUP AN ACCEPTANCE LETTER SAYING AFTER FURTHER CONSIDERATION THE AGENCY HAS DETERMINED THAT THE NOTIFICATION FOR THE BRAND NAME IS ACCEPTABLE.

USE ACTION CODE 333 WITH 10/09/01 AS THE RESUBMISSION, EPA RECEIVE, AND PM RECEIVE DATES. USE "TELEPHONE CALL FROM CONSULTANT" AS THE PRODUCT DESCRIPTOR.

THANKS MARSHALL

10/09/01

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SEP 2 7 2011

ETI-H20, Inc. 1725 Gillespie Way El Cajon, CA 92020

Attention:

Henry M. Jacoby, Agent

6709 llex Court

New Market, MD 21774

Subject:

Axen

EPA Registration No.72977-2

Notification Dated September 7, 2001

This will acknowledge receipt of your notification, submitted under the provisions of FIFRA Section 3(c)9, to add the alternate brand name "Clean Kill." Based on a review of the submitted material, the following comments apply.

The brand name is false and misleading therefore it is unacceptable and the notification has been made part of the records for this file. The proposed name can infer that your product is both a cleaner and disinfectant.

If you have any question concerning this letter, please contact Solange Garvey at (703) 308-8911.

Sincerely,

Marshall Swindell,

Product Manager 33

Regulatory Management Branch I Antimicrobial Division (7510C)

CONCURRENCES OFFICIAL FILE COPY EPA Form 1320-1A (1/90) Printed on Recycled Paper

HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 PHONE: 301-865-9090 FAX: 301-865-4333

September 7, 2001

Environmental Protection Agency Office of Pesticide Programs Antimicrobial Division (H7507C) Mr. Marshall Swindell USEPA Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Dear Marshall:

Re: Notification of Alternate Brand Name

And the

Axen, EPA File Symbol 72977-2

ETI HO, INC.

ETI $\rm H_2O$, Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please forward all correspondence relative to ETI $\rm H_2O$, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter transmits a notification for an alternate brand name for the product Axen. Axen is the primary brand name and Clean Kill will be an alternate brand name. No other changes have been made to the formulation or the label.

Sincerely yours,

Henry Nacoby

cc: G. Duren

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| United States Environmental Protect Washington DC 20 | Registration OPP Identifier Number Amendment |
| Applicati | ion for Pesticide - Section I |
| . Company/Product Number 72977-2 | 2. EPA Product Manager 3. Proposed Classification Marshall Swindell |
| Company/Product (Name) Axen | PM# Restricted |
| in Name and Address of Applicant (Include ZIP Code) ET1-H2O. Inc. 1725 Gillespie Way El Cajon, CA 92020 Check if this is a new address | 6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. Product Name |
| | Section - II |
| made to the labeling or the confidential statement of formula willfully make any false statement to EPA. I further underst | tice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been a of this product. I understand that it is a violation of 18 U. S. C. Sec. 1001 to tand that if this notification is not consistent with theterms of PR Notice 91-10 and and I may be subject to enforcement action and penalties under section 12 and 14 of |
| | Section - III |
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Henry N | 1. Jacoby | | itle | Agent | Teleph | one No. (Include Area Code)
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both under applicable la | knowingly false or mi | | II attachments ther | • | | 6. Date Application
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| Typed Name
Henry | Jacoby | 5. | Date | 4/0/ | | |
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HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 PHONE: 301-865-9090 FAX: 301-865-4333

June 22, 2001

Environmental Protection Agency Office of Pesticide Programs Antimicrobial Division (H7507C) Mr. Marshall Swindell Room 308H Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Dear Marshall:

12 No. 2 No. 1

Re: RESUBMISSION OF APPLICATION FOR NEW REGISTRATION Axen, EPA File Symbol 72977-E
ETI H20, INC.

ETI H,o, Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please forward all correspondence relative to ETI H2O, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter is in response to the Agency's letter of June 21, 2001, which requested several labeling changes. This letter transmits labeling revised as per your letter.

The label has been revised as follows:

- 1. The statements "It is a violation of Federal Law to use this product in a manner inconsistent with its labeling." has been added to the label;
- 2. The term Streptococcus has been removed from the label;
- 3. The word germ has been deleted;

- 4. The word "'glazed'' has been added before porcelain and
- 5. The section under Fast/Easy/Effective has been revised to better describe the use areas;

Office of Pesticide Programs
U. S. Environmental Protection Agency
Attn: Marshall Swindell, PM 33
RESUBMISSION FOR NEW REGISTRATION
Axen
EPA FILE SYMBOL 72977-E

June 22, 2001 Page 2

- 6. The label use directions have been revised by adding a statement requiring pre-cleaning of heavy soiled (with organic matter) surfaces;
- 7. The label has been revised to use the complete scientific name of the organisms. Staphylococcus aureus has also been added since testing was carried out with that organism also.
- 8. The label use directions have been revised by revising 1 minute to 10 minutes and by adding a statement requiring the surface to be completely wet for disinfecting.

CONTENT OF SUBMISSION 5 copies of labeling

Sincerely yours,

cc: A. Arata

E. Woolson

Filt of

Front Panel Axen EPA File Symbol 72977-E revision June 21, 2001

AXEN®

Stabilized Ionic Silver
Hard Surface Disinfectant

Active Ingredient

Silver* Citric Acid Other Ingredients

Fig. 15th

0.0012%

4.8400% 95.1588%

Total 100.0000%

* Electrolytically generated Silver ions

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-E EPA EST. No. xxxxx-x-xx Manufactured by ETI H₂O, Route 14, P. O. Box1517 Lake City, FL 32024

Net Vol. 36 oz.

Eack Panel Axen EPA File Symbol 72977-E Revised June 21, 2001

AXEN[®] Disinfectant Pump Spray kills bacteria on environmental hard surfaces (painted, glazed tile, plastic, metal, glass, glazed porcelain) in your home and public places. It eliminates odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN[®] Disinfectant Pump Spray:

In empty garbage cans
In pet areas
In sick rooms
Under sinks

In diaper pails
In empty hampers
On doorknobs
In bathrooms

Fast/Easy/Effective: AXEN® Disinfectant is effective against Salmonella chloreraesuis, Staphylococcus aureus, and Pseudomonas aeruginosa organisms. Use anywhere in the home, public places, or boats and vechicles where there are finished surfaces (painted, glazed tile, plastic, metal; glass, glazed porcelain). These include areas such as the laundry room, recreation room, kitchen, bedrooms, closets, bathroom, attic and work areas. Interiors of boats and recreational vehicles, AXEN® Disinfectant can be used in such areas as the bathroom, kitchen and anywhere there is a finished surfaces. AXEN® Disinfectant can be used to disinfectant recycling bins, diaper pails, garbage cans and other hard surface containers.

Directions for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

Surfaces that are heavy soiled with organic matter must be precleaned prior to using this product. For disinfecting, the surface must be completely wet with AXEN® Disinfectant for 10 minutes. The surface may then be wiped dry with a clean unused towel.

STORAGE AND DISPOSAL

| Storage | Do not contaminate water, food or feed by storage or |
|----------|--|
| | disposal. |
| Disposal | Do not reuse container. Rinse thoroughly before |
| 1 | discarding in trash or recycling. |

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JUL 3 1 2001

ETI H,0 Route 14 P.O. Box 1517 Lake City, FL 32024

MAIL TO: Henry Jacoby, Agent 6709 Ilex Court New Market, MD 21774

Subject: Axen

EPA Registration No. 72977-2 Letter Dated July 5, 2001

The Agency is in receipt of your submitted final printed label based on the previously accepted draft label dated June 26, 2001. The label has been placed in your product registration file and not reviewed in accordance with PR Notice 82-2.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,

Marshall Swindell Product Manager 33

Regulatory Management Branch 1

Jartha Sterre/Ja

Antimicrobial Division (7505C)

CONCURRENCES SYMBOL SURNAME EPA Form 1320-1A (1/90) Printed on Recycled Paper

¢GPO: 2000 - 187-381

HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 PHONE: 301-865-9090 FAX: 301-865-4333

July 5, 2001

Environmental Protection Agency Office of Pesticide Programs Antimicrobial Division (H7507C) Mr. Marshall Swindell Ariel Rios Building 1200 Pennsylvania Ave. Washington, D.C. 20460

Dear Marshall:

RESUBMISSION OF Final Printed Labeling Axen, EPA File Symbol 72977-2 ETI H,O, INC.

ETI н,о, Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please forward all correspondence relative to ETI H,O, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter is in response to the Agency's Notice of Pesticide Registration, dated June 26, 2001, which requested two copies of final printed labeling. This letter transmits copies of the finished labels.

The label has been revised by revising the EPA Registration Number to read TEPA Reg. No. 72977-2

CONTENT OF SUBMISSION

2 copies of final labeling

Sincerely yours,

A. Arata CC:

E. Woolson

AXEN®

Stabilized Ionic Silver Hard Surface Disinfectant

Active Ingredient

Silver* Citric Acid

Other Ingredients

0.0012%

4.8400%

95.1588%

Total 100.0000%

* Electrolytically generated Silver ions

42 15

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-2

EPA EST. No. 72977-FL-1

Manufactured by ETI H2O,

Route 14, P. O. Box 1517

Lake City, FL 32024

Net Vol. 36 oz.

NOT REVIEWED

In Accordance with PR Notice 82-80 Based on Draft Labeling Dated

AXEN® Disinfectant Pump Spray kills bacteria on environmental hard surfaces (painted, glazed tile, plastic, metal, glass, glazed porcelain) in your home and public places. It eliminates odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN® Disinfectant Pump Spray:

In empty garbage cans In pet areas In sick rooms Under sinks In diaper pails
In empty hampers
On doorknobs
In bathrooms

Fast/Easy/Effective: AXEN® Disinfectant is effective against Salmonella chloreraesuis, Staphylococcus aureus, and Pseudomonas aeruginosa organisms. Use anywhere in the home, public places, or boats and vechicles where there are finished surfaces (painted, glazed tile, plastic, metal, glass, glazed porcelain). These include areas such as the laundry room, recreation room, kitchen, bedrooms, closets, bathroom, attic and work areas. Interiors of boats and recreational vehicles, AXEN® Disinfectant can be used in such areas as the bathroom, kitchen and anywhere there is a finished surfaces. AXEN® Disinfectant can be used to disinfectant recycling bins, diaper pails, garbage cans and other hard surface containers.

Directions for Use

lt is a violation of Federal Law to use this product in a manner inconsistent with its labeling

Surfaces that are heavy soiled with organic matter must be pre-cleaned prior to using this product. For disinfecting, the surface must be completely wet with AXEN® Disinfectant for 10 minutes. The surface may then be wiped dry with a clean unused towel.

STORAGE AND DISPOSAL

| Storage | Do not contaminate water, food or feed by storage or disposal. |
|----------|---|
| Storage | |
| Disposal | Do not reuse container. Rinse thoroughly before discarding in trash or recycling. |

Stabilized Ionic Silver Hard Surface Disinfectant

Active Ingredient

Silver* Citric Acid

Other Ingredients

0.0012%

4.8400%

95.1588%

Total 100.0000%

* Electrolytically generated Silver ions

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KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-2

EPA EST. No. 72977-FL-1

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In empty garbage cans
In pet areas
In sick rooms
Under sinks

In diaper pails
In empty hampers
On doorknobs
In bathrooms

Fast/Easy/Effective: AXEN® Disinfectant is effective against Salmonella chloreraesuis, Staphylococcus aureus, and Pseudomonas aeruginosa organisms. Use anywhere in the home, public places, or boats and vechicles where there are finished surfaces (painted, glazed tile, plastic, metal, glass, glazed porcelain). These include areas such as the laundry room, recreation room, kitchen, bedrooms, closets, bathroom, attic and work areas. Interiors of boats and recreational vehicles, AXEN® Disinfectant can be used in such areas as the bathroom, kitchen and anywhere there is a finished surfaces. AXEN® Disinfectant can be used to disinfectant recycling bins, diaper pails, garbage cans and other hard surface containers.

Directions for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

Surfaces that are heavy soiled with organic matter must be pre-cleaned prior to using this product. For disinfecting, the surface must be completely wet with **AXEN® Disinfectant** for 10 minutes. The surface may then be wiped dry with a clean unused towel.

STORAGE AND DISPOSAL

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| Storage | Do not contaminate water, food or feed by storage or disposal. |
|----------|---|
| Disposal | Do not reuse container. Rinse thoroughly before discarding in trash or recycling. |

SUBMISSION BAR CODE & S5 99534 REVIEWER MTCFF4

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U.S. ENVIRONMENTIAL PROTECTION AGENCY Office of Pesucide Programs Registration Division (H7505C) 401 "M" St., S.W.

H "M" St., S W Washington, D.C. 20460. EPA Reg. Number:

Date of Issuance.

72977-2

JUN 26 EUG

NOTICE OF PESTICIDE:

x Registration
Reregistration

(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

Axen

Name and Address of Registrant (include ZIP Code):

ETI H₂O Route 14, Box 1517 Lake City, FL 32054

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/recegistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
 - 2. Make the following label changes:
 - a. Revise the EPA Registration Number to read, "EPA Reg. No. "72977-2".

Marshall Swindell, PM 33
Regulatory Management Branch I
Antimicrobial Division (7510C)

Date:

EPA Farm SS70-6

b. Submit two copies of the revised final printed label for the records.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

48. F. G.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,

Marshall Swindell

Product Manager 33

Regulatory Management Branch 1 Antimicrobial Division (7510C)

Enclosure

Front Panel Axen EPA File Symbol 72977-E revision June 21, 2001

AXEN®

Stabilized Ionic Silver
Hard Surface Disinfectant

Active Ingredient
Silver*
Citric Acid
Other Ingredients

0.0012% 4.8400% 95.1588%

Total 100.0000%

* Electrolytically generated Silver ions

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-E

EPA EST. No. xxxxx-x-xx

Manufactured by ETI H,O,

Route 14, P. O. Box1517 Lake City, FL 32024

Net Vol. 36 oz.

ACCEPTED with COMMENTS in EPA Letter Dated:

JUN 2 6 2001

Under the Federal Insecticide, Fungicide, and Rodonticide Act as amended, for the pesticide, registered under EPA Reg. No.

72999-2

Back Panel Axen EPA File Symbol 72977-E Revised June 21, 2001

AXEN® Disinfectant Pump Spray kills bacteria on environmental hard surfaces (painted, glazed tile, plastic, metal, glass, glazed porcelain) in your home and public places. It eliminates odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN® Disinfectant Pump Spray:

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In empty hampers
On doorknobs
In bathrooms

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Directions for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

Surfaces that are heavy soiled with organic matter must be precleaned prior to using this product. For disinfecting, the surface must be completely wet with AXEN® Disinfectant for 10 minutes. The surface may then be wiped dry with a clean unused towel.

STORAGE AND DISPOSAL

Storage Do not contaminate water, food or feed by storage or disposal.

Disposal Do not reuse container. Rinse thoroughly before discarding in trash or recycling..

ACCEPTED with COMMENTS in EPA Letter Dated:
JUN 2 6 2001

Under the Foderal Insecticide, Pungicide, and Rodendicide Act as amended, for the pesticide, registered under EPA Reg. No.

HENRY JACOMY REGULATORY CONSULTANT

APPEACS INTREE COVERSPAGES

From: Henry Jacoby

To: Attn: Marshall Swindell/Martha Terry

Fax #: 1-703-308-8481

Company: ETI H2O, Inc.

Fax #: 301/865-4333

Tel#: 301-865-9090

Subject: Axen and Axenohl Resubmissions

Sent: June 22, 2001

Pages: 11 (including

cover)

MESSAGE:

Marshall/Martha,

I am faxing copies of resubmissions for Axenohl, EPA File Symbol 79277-R (revised label and CFR) and for Axen, EPA File Symbol 79277-E (label revisions). The original will be Fed-Ex ed to you for delivery by Monday A.M.. I hope that you can work with the faxed copies to issue the registrations. Can you fax me a copy of registration notice and stamped label when approved.

Thank you,

Henry M. Jacoby

THE INFORMATION IN THIS FAX IS CONFIDENTIAL AND PRIVILEGED INFORMATION OR WORK PRODUCT. THE INFORMATION IS INTENDED ONLY FOR THE USE OF THE PERSON OR ENTITY TO WHOM IT IS ADDRESSED. IF YOU ARE NOT THE INTENDED RECIPIENT OR THE EMPLOYEE OR AGENT RESPONSIBLE TO DELIVER IT TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY USE, DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS COMMUNICATION IS STRICTLY PRODUCTED, IF YOU HAVE RECEIVED THE FAX IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE, AND RETURN THE ORIGINAL NIESSAGE TO US AT 6709 ILEX COURT, NEW MARKET, MD 21774-2907 VIA THE US POSTAL SERVICE. THANK YOU.

HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 PHONE: 301-865-9090 FAX: 301-865-4333

June 22, 2001

Environmental Protection Agency Office of Pesticide Programs Antimicrobial Division (H7507C) Mr. Marshall Swindell Room 308H Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Dear Marshall:

Re: RESUBMISSION OF APPLICATION FOR NEW REGISTRATION Axen, EPA File Symbol 72977-E
ETI H,O, INC.

ETI H,O, Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please forward all correspondence relative to ETI H,O, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter is in response to the Agency's letter of June 21, 2001, which requested several labeling changes. This letter transmits labeling revised as per your letter.

The label has been revised as follows:

- 1. The statements "It is a violation of Federal Law to use this product in a manner inconsistent with its labeling." has been added to the label;
- 2. The term Streptococcus has been removed from the label;
- 3. The word germ has been deleted;

44. 1 5 Ex

- 4. The word "glazed" has been added before porcelain and tile.
- 5. The section under Fast/Easy/Effective has been revised to better describe the use areas;

Office of Pesticide Programs
U. S. Environmental Protection Agency
Attn: Marshall Swindell, PM 33
RESUBMISSION FOR NEW REGISTRATION
Axen
EPA FILE SYMBOL 72977-E

June 22, 2001 Page 2

- 6. The label use directions have been revised by adding a statement requiring pre-cleaning of heavy soiled (with organic matter) surfaces;
- 7. The label has been revised to use the complete scientific name of the organisms. Staphylococcus aureus has also been added since testing was carried out with that organism also.
- 8. The label use directions have been revised by revising 1 minute to 10 minutes and by adding a statement requiring the surface to be completely wet for disinfecting.

CONTENT OF SUBMISSION

5 copies of labeling

Sincerely yours,

cc: A. Arata

E. Woolson

HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 PHONE: 301-865-9090 FAX: 301-865-4333

May 2, 2001.

Environmental Protection Agency Office of Pesticide Programs Antimicrobial Division (H7507C) Mr. Marshall Swindell Room 308H Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Dear Marshall:

Re: RESUBMISSION OF APPLICATION FOR NEW REGISTRATION Axen, EPA File Symbol 72977-E
ETI HO, INC.

ETI H,O, Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please refer to the enclosed letter of appointment signed by Andrew Arata, President of ETI H,O, Inc.

Please forward all correspondence relative to ETI H,O, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter is in response to the Agency's letter of March 26, 2001 which delineated several deficiencies with the application.

Regarding the inhalation toxicity test, ETI H,O, Inc is requesting a waiver from the requirement. See the attachment for further information.

I believe the confusion over the efficacy study to which you refer to in your letter of November 29, 2000 has been cleared up as a result of our meeting with your staff. It is my understanding the AOAC use dilution study (MRID No. 45016906) has been put into review.

Enclosed is a data matrix for silver and citric acid. The method of support for this application is the "Selective Method." The

Office of Pesticide Programs
U. S. Environmental Protection Agency
Attn: Marshall Swindell, PM 33
RESUBMISSION FOR NEW REGISTRATION
Axen
EPA FILE SYMBOL 72977-E

05/02/01

Page 2

application relies on the data references given in the Agency's Reregistration Eligibility Document (RED) for silver and citric acid. These documents relied on information in the public literature to support the reregistration of silver and citric acid. Since the proposed uses of AXEN is not substantially different from the currently registered uses, the waivers given in the RED should apply to the toxicity and exposure data requirements needed to support this application. The only exception to this is the two avian studies, which were submitted by Mason Chemical Company. ETI H₂O has sent a offer to pay letter to Mason Chemical Company.

CONTENT OF SUBMISSION

- 1. EPA Form 8570-1 (EPA File Symbol 72977-E).
- 2. EPA Form 8570-4 (two original copies).
- 3. EPA Form 8570-34 (Selective method, using cited data).
- 4. EPA Form 8570 (agency internal copy and public file copy) for silver, citric acid and citric acid and silver.
- 5. Request for a Waiver from Acute Inhalation Testing with supporting report.
- 6. Five (5) copies of draft labeling.
- 7. Agent appointment letter of April 27, 2001

Sincerely yours,

Henry Jacoby

| &E | PΑ |
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United States Environmental Protection Agency Washington DC 20460

| X_{i} | Registration
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OPP Identifier Numbe

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| Application for | Pesticide - Section I | | | |
| 1. Company/Product Number 72977-E | 2. EPA Product Manager
Marshall Swindeli | 3. Proposed Classification | | |
| 4. Company/Product (Name) Axen | PM# 33 | None Restric | | |
| 5. Name and Address of Applicant (Include ZIP Code) ETI H2O Route 14. Box 1517 Lake City, FL 32034 Check if this is a new address | 6. Expedited Review. In accordance with FIFRA Section 3(c)(3 (b)(i), my product is similar or identical in composition and labelic to: EPA Reg. No | | | |
| | Product Name
ction - II | | | |
| <u> </u> | OUOTI - II | | | |
| Amendment - Explain below. Resubmission in response to Agency letter dated 3/26/01 Notification - Explain below. | Final printed labels in response to Agency letter dated "Me Too" Application. Other - Explain below. | <u> </u> | | |
| .xplanation: Use additional page(s) if necessary. (For section I and S | ection II.} | | | |
| Sec | tion - III | <u> </u> | | |
| Material This Product Will Be Packaged In: | | | | |
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her (Specily) | | |
| 3. Location of Net Contents Information 4. Size(s) Retail Contai | iner 3. Location of Label C | Directions | | |
| Label Container | On Label On Labeling | accompanying product | | |
| 6. Manner in Which Label is Allixed to Product Lithograph Paper glued Stenciled | Other | | | |
| | ction - IV | | | |
| 1. Contact Point (Complete items directly below for Identification of indiv | ridual to be contacted, if necessary, to proces | s this application.) | | |
| Nam e Title Henry Jacoby | Agent | phone No. (Include Area Code
(301) 865-9090 | | |
| Certification
I certify that the statements I have made on this form and all attac
I acknowledge that any knowingly talse or misleading statement m
both under applicable law. | | . 6. Date Application
Received
(Stamped) | | |
| 2. Signature 3. Title | Agent, ETI H2O | | | |
| 4. Typed Name Henry Jacoby, Agent | La lac | | | |

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JUN 2 1 2001

ETI H,O Route 14, Box 1517 Lake City, FL 32054

Attention: Henry Jacoby, Agent

Subject: Axen

EPA File Symbol 72977-E

Letters Dated April 24, 2001 and May 2, 2001

The Agency has determined that your application is incomplete. Before the Agency can continue processing your application you must satisfy the deficiencies below.

LABELING .

Submit five (5) copies of draft labeling revised in accordance with the following instructions.

- 1. Include the following statement directly below the "Directions For Use" heading.
 - "It is a violation of Federal Law to use this product in a manner inconsistent with its labeling."
- 2. No efficacy data were submitted for any Streptococcus ssp. The term "Streptococcus" must be removed.
 - 4. Refer to the Efficacy Review for additional labeling comments.

EFFICACY

The submitted efficacy data were found to be acceptable. However, refer to the attached efficacy review under "LABELING" for labeling deficiencies and revise accordingly.

ACUTE TOXICITY

As per the Agency's letter dated March 15, 2001, the following acute toxicity data (Oral, Sensitization, Dermal, Eye Irritation, Skin Irritation) studies are acceptable. A waiver request Please refer to the attached toxicity for the Acute Inhalation study was also found acceptable concurrences SYMBOL SURNAME DATE OFFICIAL FILE COPY EPA Form 1320-1A (1/90)

Printed on Recycled Paper

PRODUCT CHEMISTRY/CSF

The Product Chemistry Data was found to be acceptable. The Confidential Statement of Formula (CSF) dated June 2, 2001 is in compliance with PR Notice 92-1, agrees with the label and is acceptable.

However, on your CSF, the total weight in item #17 must be included. Submit a new CSF for our records.

This letter does not constitute registration and the product may not be lawfully marketed until all the required information has been submitted for review and found acceptable.

If you have any questions concerning this letter, please contact Martha Terry at (703) 305-6982.

Sincerely,

Marshall Swindell

Acting Product Manager 33

Regulatory Management Branch I

Antimicrobial Division (7505C)

Attachment

Front Panel Axen EPA File Symbol 72977-E revision May 2, 2001

axen®

Stabilized Ionic Silver
Hard Surface Disinfectant

Active Ingredient

 $4 \varphi_{k_0}^{-1/2} \in \mathcal{L}_{\lambda_0}$

 Silver*
 0.0012%

 Citric Acid
 4.8400%

 Other Ingredients
 95.1588%

 Total 100.0000%

* Electrolytically generated Silver ions

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-E

EPA EST. No. xxxxx-x-xx

Manufactured by ETI H,O,

Route 14, P. O. Box1517 Lake City, FL 32024

Net Vol. 36 oz.

Back Panel Axen EPA File Symbol 72977-E Revised May 2, 2001

AXEN[®] Disinfectant Pump Spray kills bacteria on environmental hard surfaces (painted, tile, plastic, metal, glass, porcelain) in your home and public places. It eliminates germs and odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN[®] Disinfectant Pump Spray:

In empty garbage cans
In diaper pails
In pet areas
In empty hampers
In sick rooms
On doorknobs
Under sinks
In bathrooms

Fast/Easy/Effective: Use on finished surfaces in basements, closets, attics, laundry rooms, storage areas, vacation homes, boat interiors, shower stalls, and recycling bins. AXEN® Disinfectant Pump Spray is effective against Salmonella, Streptococcus, and Pseudomonas organisms.

Directions for Use

To disinfect, spray surface with AXEN® Disinfectant and let stand for 1 minute.

STORAGE AND DISPOSAL

| Do not contaminate water, food or feed by storage or disposal. |
|---|
| Do not reuse container. Rinse thoroughly before discarding in trash or recycling. |

DP BARCODE: D274407

CASE: 068118

SUBMISSION: S596157

DATA PACKAGE RECORD

BEAN SHEET

DATE: 04/25/01 Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 189 RESB FOPA-OC-ME TOO

CHEMICALS:

ID#: 072977-E AXEN

COMPANY: 072977 ETI H2O, INC.

PRODUCT MANAGER: 33 MARSHALL SWINDELL 703-308-6341 ROOM: CS1 PM TEAM REVIEWER: MARTHA TERRY 703-308-6217 ROOM: CS1 6W10

RECEIVED DATE: 04/24/01 DUE OUT DATE: 08/22/01

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 274407 EXPEDITE: Y <u>DATE SENT: 04/25/01</u> DATE RET.: / /

CHEMICAL:

P TYPE: 001

CSF: N LABEL: Y

DATE IN ASSIGNED TO DATE OUT ADMIN DUE DATE: 07/29/01 1 4/26/01 DIV : AD NEGOT DATE: 7 /2Z/O/ BRAN: PSB 4/24/01 PROJ DATE: / / SECT: EET 4/26/01

REVR : Wh 5/3/01 CONTR:

* * * DATA REVIEW INSTRUCTIONS * * *

Please review the Efficacy Data (AOAC Use Dilution Test -MRID#450169) to support the new product for registration. This Data is for both registrations (72977-R and 72977-E) Also, included in this package is a copy of the company current proposed labels for both products and a copy of our "Minutes of Meeting which was held on 3/24/01 for both products. Thanks

* DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * *

DP BC BRANCH/SECTION DATE OUT DUE BACK INS CSF LABEL

Front Panel Axen EPA File Symbol 72977-E revision May 2, 2001

AXEN®

Stabilized Ionic Silver Hard Surface Disinfectant

Active Ingredient

* Electrolytically generated Silver ions

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-E

EPA EST. No. xxxxx-x-xx

Manufactured by ETI H,O,

Route 14, P. O. Box1517 Lake City, FL 32024

Net Vol. 36 oz.

Back Panel Axen EPA File Symbol 72977-E Revised May 2, 2001

AXEN® Disinfectant Pump Spray kills bacteria on environmental hard surfaces (painted, tile, plastic, metal, glass, porcelain) in your home and public places. It eliminates germs and odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN® Disinfectant Pump Spray:

In empty garbage cans .
In pet areas
In sick rooms
Under sinks

In diaper pails
In empty hampers
On doorknobs
In bathrooms

Fast/Easy/Effective: Use on finished surfaces in basements, closets, attics, laundry rooms, storage areas, vacation homes, boat interiors, shower stalls, and recycling bins. AXEN® Disinfectant Pump Spray is effective against Salmonella, Streptococcus, and Pseudomonas organisms.

Directions for Use

To disinfect, spray surface with AXEN® Disinfectant and let stand for 1 minute.

STORAGE AND DISPOSAL

| Storage | Do not contaminate water, food or feed by storage or disposal. |
|---------|---|
| | Do not reuse container. Rinse thoroughly before discarding in trash or recycling. |

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460



OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES Antimicrobials Division

May 30, 2001

MEMORANDUM:

Subject: Efficacy Review EPA Reg. No. 72977-R and 72977-E Axenohl and Axen

DP Barcode 274402 and 274407 Case No. 065218 and 652118

From: Nancy Whyte, Microbiologist Www

Efficacy Evaluation Team Product Science Branch

Antimicrobials Division (7510C)

To: Marshall Swindell/Karen Leavy-Munk

Regulatory Management Branch I Antimicrobials Division (7510C)

Thru: Emily Mitchell, M.S., Team Leader

Efficacy Evaluation Team Product Science Branch

Antimicrobials Division (7510C)

Thru: Michele E. Wingfield, Chief

Product Science Branch

Antimicrobials Division (7510C)

Applicant: ETI H₂O

Route 15, PO Box 1517 Lake City FL 32024

Formulation Label: % by wt.

 Active Ingredient(s)

 Silver*
 0.0012%

 Citric acid
 4.8400%

 Inert Ingredients
 95.1588%

 Total
 100.0000%

*Electronically generated silver ions

I. Background:

The registrant has submitted two data packages for review of efficacy data to support

the registration of both a manufacturing-use product and an end-use product. The MUP (Axenhol) is used to formulate end-product disinfectants. The end-product (Axen) is distributed in a spray bottle for disinfection of hard, non-porous environmental surfaces in homes and and institutions. The efficacy data was conducted on the MUP and submitted for review in one volume (MRID No. 450169-06).

II. Use Directions:

The directions for use printed on the label for *Axen* specify that surfaces to be disinfected should be sprayed with Axen and allowed to stand for one minute. There are no other directions for use on the end- product label. The MUP *Axenhol* label states that the product is to be diluted 1:199 with 4.76% aqueous citric acid for manufacturing use only.

III. Agency Standards for Proposed Change:

The Agency standard for hard surface, non-porous surface disinfectants is found in DIS-TSS-1 and -2 which specifies that the Association of Official Analytical Chemists (AOAC) Use-Dilution Test or Germicidal Spray Product Test be used in testing. This procedure requires that sixty carriers must be tested against each of both Salmonella choleraesuis, ATCC 10708 and Staphylococcus aureus, ATCC 6538, with each of three batches of the product, one of which must be at least 60 days old. If the product is to be used in health care facilities, the product must also be tested against Pseudomonas aeruginosa, ATCC 15442 (180 carriers per sample, a total of 40 carriers) The product must demonstrate that it kills all organisms on 59 out of each 60 carriers in order to support label claims for its effectiveness against these organisms. If additional disinfectant claims are made for other organisms, ten carriers for each specific organism must be tested with each of 2 samples, representing different batches (10 carriers per sample, a total of 20 carriers for each organism). Killing of all organisms on all carriers is required to demonstrate effectiveness.

IV. Summary of Submitted Study:

Efficacy testing to support registration requirements for this product were conducted by MicroBioTest, Inc. in Sterling, Va. in October 1999. A Good Laboratory Practices Statement was included with results of the efficacy study. According to the protocol included in the data submitted to the Agency, the testing procedure followed the AOAC Official Methods of Analysis, 15th edition. 1990 Use-Dilution Test. Three lots of Axenhol, Lot #AG-006. prepared in April 1999, Lot #8991, prepared in September 1999, and Lot #8995, prepared also in September 1999 were used as the testing material. The samples received from the registrant were prepared at the testing facility by adding one gram of the active test agent to 199 grams of 5%(w/w) citric acid solution to achieve a 200-gram final dilution. This dilution is equivalent to the ready-to-use end-product Axen. No organic soil load was added. Polished stainless steel penicylinders were used as carriers. Strains of Salmonella choleraesuis, ATTC 10708; Staphylococcus aureus, ATCC 6538, and Pseudomonas aeruginosa, ATCC 15442 from stock culures were transferred daily for three consecutive days prior to use. Gram stains were used to verify growth. The inoculated cylinders were exposed to the product samples for 10 minutes at 20° +/-! C. The inoculum confirmation counts for each organism were as follows: Sal. choleraesuis, 1.1 x 10⁸, S: áureus , 4.2 x 10⁸, and Pseudomonas aeruginosa, 1.1 x 10⁸. Following incubation at 37 +/- 2°C for 48 hours, 59 of 60 carriers showed no growth when exposed to the product for 10 minutes, confirming the effectiveness of the product. All sterility

and viability control cultures met the criteria for a valid test.

V. Labeling:

- This label is need of a complete re-working.
- The word "germs" must be removed from page two of the label.
- 3. The terms "tile" and "porcelain" must be preceded by the word "glazed"
- 4. In the section Fast/Easy/Effective: the specific items and locations in basements, attics, storage areas, vacation homes, and boat interiors must be listed. These areas are too general for label claims.
- No efficacy testing has been done for any Streptococcus ssp. The term "Streptococcus" must be removed.
- 6. Since no organic soil load was added in the efficacy testing procedure, a pre-cleaning step should be included in the directions especially in sick rooms, pet areas, and diaper pails
- 7. The complete scientific names of the organisms tested for which label claims are made should be listed; i.e., Salmonella choleraesuis, Pseudomonas aeruginosa, Staphylococcus aureus
- 8. The exposure time listed on the label for Axen is I minute. Efficacy testing was conducted with an exposure time of 10 minutes. The words "one minute" must be replaced with "ten minutes". Additional directions for completely wetting the surfaces, and any directions for removing any excess product must be added.

VI. Comments and Recommendations:

- 1. The manufacturing-use product Axenhol when tested at a 1:199 dilution (equivalent to the end-use product Axen) demonstrated effectiveness against Salmonella choleraesuis, ATCC 10708, Staphyloccocus aureus, ATCC 6538, and Pseudomonas aeruginosa, ATCC 15442 exposed to the product for ten minutes.
- 2. The use of an organic soil load should be considered for future testing of other organisms that might be added to label claims.

42 To 15 A

Product Manager Please Note:

Please arrange a meeting with the registant's consultant Mr. Jacoby to conduct a full label review of these products and give him instructions on how to format an acceptable label. He is aware that the attached label is woefully inadequate.

DP BARCODE: D274823

SUBMISSION: S597003 CASE: 068118

DATA PACKAGE RECORD

BEAN SHEET

DATE: 05/10/01 Page 1 of 1

* * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION CHEMICALS:

ACTION: 189 RESB FOPA-OC-ME TOO

1D#: 072977-E AXEN

COMPANY: 072977 ETI H2O, INC.

PRODUCT MANAGER: 33 MARSHALL SWINDELL 703-308-6341 ROOM: CS1 6B PM TEAM REVIEWER: MARTHA TERRY 703-308-6217 ROOM: CS1 6W10

RECEIVED DATE: 05/08/01 DUE OUT DATE: 09/05/01

* * * DATA PACKAGE INFORMATION * * *

EXPEDITE: N DATE SENT: 05/10/01 DATE RET.: / DP BARCODE: 274823

CHEMICAL:

)P TYPE: 001

CSF: Y LABEL: Y

DATE IN DATE OUT ADMIN DUE DATE: 08/13/01 ASSIGNED TO 5/10/01 / NEGOT DATE: 8/5/0/ DIV : AD PROJ DATE: 7/2//0/ 5/10/01 BRAN: PSB SECT: CTT 5/10/01

REVR : Willace 5/14/01

CONTR:

* * * DATA REVIEW INSTRUCTIONS * * *

Attention: Wallace Powell

PLEASE REVIEW: This package contains a data waiver request for an acute inhalation study, NEW LABEL and a revised CSF, along with other documentations to support this new

chemical. Thanks

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * *

DP BC BRANCH/SECTION DATE OUT DUE BACK INS CSF LABEL 05/10/01 08/13/01 Y 274821 PSB/CTT Y Υ



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

June 21, 2001

MEMORANDUM

Subject: D274823

AXEN, EPA File Symbol 72977-E

From:

Wallace Powell, Biologist

Product Science Branch

Antimicrobials Division (7510C)

Thru:

Karen P. Hicks, Team Leader

Chemistry/Toxicology Team Product Science Branch

Antimicrobials Division (7510C)

Michele E. Wingfield, Chief

Product Science Branch

Antimicrobials Division (7510C)

To:

Marshall Swindell, Product Manager, Team 33

Martha Terry, Team Reviewer, Team 33

Regulatory Management Branch I Antimicrobials Division (7510C)

BACKGROUND

The applicant, ETI H_2O , Inc. (as represented by an agent), has submitted a package for registration of the subject product, AXEN. The package includes requests for waiver of acute oral toxicity, acute dermal toxicity, acute inhalation toxicity, skin irritation, and skin sensitization data. The acute inhalation waiver requests is accompanied by a submitted rationale. The other four waiver requests are accompanied by citation of the agency's Citric Acid Reregistration Eligibility Decision (RED) document. For the eye irritation requirement, a study on AXEN (MRID 450165-01) was previously accepted.

AXEN is labeled as a hard surface disinfectant pump spray product containing the active ingredients silver (as ions, 0.0012% of the formulation by weight) and citric acid (4.84% of the formulation by weight).

RECOMMENDATION

Eye irritation

Eye irritation has been assigned to Category IV, based on MRID 450165-01 (refer to 05/08/00 Product Science Branch memorandum, Data Package D263138).

Acute oral and acute dermal toxicity, skin irritation

The applicant has cited the Citric Acid RED to support these data requirements. Based on the product formulation, the acute toxicity and skin irritation of AXEN is expected to be similar to what the citric acid component would be, at its concentration of 4.8%. This is far less than the concentration which the Citric Acid RED characterizes as mild with respect to systemic acute toxicity. Therefore, Product Science Branch (PSB) recommends Category IV for acute oral and acute dermal toxicity.

The RED characterizes technical grade citric acid as a moderate skin irritant. However, because 4.8% is far less concentration than technical grade and because the submitted eye irritation study for AXEN indicates eye irritation Category IV, skin irritation Category IV is also expected.

As further support for Category IV, note that in a 03/15/01 agency letter, the applicant's other product Axehnol (EPA File Symbol 72977-R) was assigned Toxicity Category IV for acute oral and acute dermal toxicity and for skin irritation, based on submitted studies (refer to 02/03/01 PSB memorandum, Data Package D270802). AXEN has similar components but is far less concentrated than Axehnol.

Skin sensitization

PSB recommends classification of AXEN as Non-sensitizer. The applicant has cited the Citric Acid RED document, which of course indicates no concern regarding skin sensitization for that chemical. The small set of additional chemicals in AXEN are not expected to add significant skin sensitization potential at the concentrations present.

Acute inhalation toxicity

The request for waiver of acute inhalation toxicity data is acceptable, for the following reasons.

- Based on the product formulation, the acute toxicity of AXEN is expected to be similar to what the citric acid component would be, at its concentration of 4.8%. This is far less than the concentration which the Citric Acid RED characterizes as mild with respect to systemic acute toxicity.
- Based on the Category IV data mentioned above for Axehnol (EPA File Symbol 72977-R), which is more concentrated than AXEN, the acute toxicity of AXEN is expected to be quite mild.

• Although some inhalation exposure is expected, it is not expected to be particularly great, as the applicant points out. (No aerosol application appears on the label, and the product is not expected to be highly volatile.) This of course is not sufficient waiver justification in itself, but it is somewhat meaningful in association with the above comments.

Summary

An acute toxicity regulatory status for the subject product is summarized in the following table.

| Data Requirement | Means of Support | Status/ Acute Tox. Category |
|-----------------------|---|-----------------------------|
| Acute Oral Toxicity | Waiver request and RED citation | Waived/ IV |
| Acute Dermal Toxicity | Waiver request and RED citation | Waived/ IV |
| Acute Inhalation Tox. | Waiver request and RED citation | Waived/ IV |
| Eye Irritation | Previously submitted study,
MRID 450165-01 | Acceptable/ IV |
| Skin Irritation | Waiver request and RED citation | Waived/ IV |
| Skin Sensitization | Waiver request and RED citation | Waived/ Non-sensitizer |

Product Labeling

The human-hazard precautionary statements on the proposed product label identified as "revision May 2, 2001," are acceptable. (They are "KEEP OUT OF REACH OF CHILDREN" and "CAUTION".) No first aid statements are required.

DP BARCODE: D274821

SUBMISSION: S597003

DATA PACKAGE RECORD

BEAN SHEET

DATE: 05/10/01

Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 189 RESB FOPA-OC-ME TOO

CHEMICALS:

ID#: 072977-E AXEN

COMPANY: 072977 ETI H2O, INC.

PRODUCT MANAGER: 33 MARSHALL SWINDELL 703-308-6341 ROOM: CS1 6B PM TEAM REVIEWER: MARTHA TERRY 703-308-6217 ROOM: CS1 6W10

RECEIVED DATE: 05/08/01 DUE OUT DATE: 09/05/01

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 274821 EXPEDITE: N DATE SENT: 05/10/01 DATE RET.: / /

CHEMICAL:

DP TYPE: 001

CSF: Y LABEL: Y

ASSIGNED TO DATE IN DATE OUT
DIV: AD 5//0/0/ / / ADMIN DUE DATE: 08/13/01 DIV : AD / / NEGOT DATE: 8/5/0/

5/10/01 BRAN: PSB SECT: CTT HEK PROJ DATE: 7 /2//0/ 5/10/01

REVR : / Cott

CONTR:

* * * DATA REVIEW INSTRUCTIONS * * *

Attention: Nancy Whyte

Please review the revised CSF, NEW LABEL, and MSDS along with other documentations to support the new chemical for registration. This information was requested by the Agency per meeting with the company, ETI H20, on 4/24/01.

PLEASE NOTE: Nancy has the original package for this new chemical. Please give directly to her. Thanks

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC BRANCH/SECTION DATE OUT DUE BACK INS CSF LABEL

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: Product Chemistry Review of Axen

DP Barcode: **D274821**

Reg. No. or File Symbol: 72977-E

Manufacturing-use [X]

End-use Product []

Active Ingredient Composition:

* electrolytically generated silver ions

TO:

Marshall Swindell PM 33

FROM:

Alex Traska, Chemist

Product Science Branch, CT Team

Antimicrobials Division (7510C)

THRU:

Karen P. Hicks, CT Team Leader

Product Science Branch

Antimicrobials Division (7510C)

THRU:

Michele E. Wingfield, Chief

Product Science Branch

Antimicrobials Division (7510 C)

BACKGROUND:

This re-submission, in support of the new product registration of Axen (EPA Reg. No. 72977-E.) an end-use hard surface disinfectant was submitted by regulatory consultant Henry Jacoby, on behalf of the registrant, ETI H2O, Inc.

This re-submission, in support of the Axen registration, which is in response

to the March 26, 2001 Agency letter. In this letter a number of critical deficiencies were noted. This re-submission addresses the corrections which were requested in the Agency letter.

The following documents were submitted and examined in the chemistry review of this submission: agent's cover letter dated May 2, 2001, application covering this re-submission dated 5/2/01, revised Basic Formulation CSF for Axen dated 5/2/01, Certification with Respect to Citation of Data dated 5/2/01 which opted for the selective method of support, Data Matrix dated 5/2/01 for silver and citric acid, technicalinformation covering citric acid and revised product label dated May 2, 2001.

FINDINGS:

- 1. Citric acid or its synonym, anhydrous citric acid, is now identified as an active ingredient in the CSF and on the label.
- 2. All other deficiencies noted in the prior review have been adequately addressed.
- 3. All other elements of the submission and CSF were acceptable.

1.5

RECOMMENDATIONS:

This re-submission, in support of the new product registration of \mathbf{Axen} , is accepted.

06/15/01 AT

HENRY JACOBY REGULATORY CONSULTANT

6709 ILEX COURT NEW MARKET, MD 21774 PHONE: 301-865-9090 FAX: 301-865-4333

May 2, 2001

Environmental Protection Agency Office of Pesticide Programs Antimicrobial Division (H7507C) Mr. Marshall Swindell Room 308H Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA 22202

Dear Marshall:

Re: RESUBMISSION OF APPLICATION FOR NEW REGISTRATION
Axen, EPA File Symbol 72977-E
ETT HO, INC

ETI HO Inc. has appointed Henry Jacoby to represent it as its agent before the Office of Pesticide Programs of EPA. Please refer to the enclosed letter of appointment signed by Andrew Arata, President of ETI HO, Inc.

Please forward all correspondence relative to ETI HO, Inc to Henry Jacoby, 6709 Ilex Court, New Market, MD 21774.

This letter is in response to the Agency's letter of March 26, 2001 which delineated several deficiencies with the application.

Regarding the inhalation toxicity test, ETI Ho, Inc is requesting a waiver from the requirement. See the attachment for further information.

I believe the confusion over the efficacy study to which you refer to in your letter of November 29, 2000 has been cleared up as a result of our meeting with your staff. It is my understanding the AOAC use dilution study (MRID No. 45016906) has been put into review.

Enclosed is a data matrix for silver and citric acid. The method of support for this application is the "Selective Method." The

Office of Pesticide Programs
U. S. Environmental Protection Agency
Attn: Marshall Swindell, PM 33
RESUBMISSION FOR NEW REGISTRATION
Axen
EPA FILE SYMBOL 72977-E

05/02/01 Page 2

application relies on the data references given in the Agency's Reregistration Eligibility Document (RED) for silver and citric acid. These documents relied on information in the public literature to support the reregistration of silver and citric acid. Since the proposed uses of AXEN is not substantially different from the currently registered uses, the waivers given in the RED should apply to the toxicity and exposure data requirements needed to support this application. The only exception to this is the two avian studies, which were submitted by Mason Chemical Company. ETI H₂O has sent a offer to pay letter to Mason Chemical Company.

CONTENT OF SUBMISSION

- 1 EPA Form 8570-1 (EPA File Symbol 72977-E)
- 2. EPA Form 8570-4 (two original copies).
- 3. EPA Form 8570-34 (Selective method, using cited data).
- 4 EPA Form 8570 (agency internal copy and public file copy) for silver, citric acid and citric acid and silver.
- 5. Request for a Waiver from Acute Inhalation Testing with supporting report.
- 6 Five (5) copies of draft labeling.
- 7 Agent appointment letter of April 27, 2001

Sincerely yours,

Henry Jacoby

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farshall Swin | dell | 3. Proposed Class | - |
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Axon | | РМ# | 33 | | None [| Restricted |
| ETI H2O
Route 14, Box 1
Lake City, FL | | | (b)(i), my p
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| | | Se | ction - IV | | | | |
| 1. Contact Point (Comp. | lete items directly below for | Identification of indi | vidual to be cont | acted, if nece | ssary, to proces | s this application.) | |
| Name
F | Henry Jacoby | Title | Age | ent | Tele | phone Na. (înclude
(301) 865-90 | |
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Lany knowingly false or mi
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| : Signature | en Vacol | 3. Tille | Agei | ıt, ETI H2O | | | |
| . Typed Name | y Jacoby, Agent | 5. Date | 5/2 | for | | | |
| PA Form 8570-1 (Rev. 8 | -94) Previous editions are o | bsolele. | 7 | White - EPA | File-Copy (orig | inal) Ye'low - Ap | oplicant Copy |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

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estimate or any other aspect of this collection of inform
vision (2137), U.S. Environmental Profection Agency, 4 | g time for reading th
ation, including sugg | nated to average 1.25 hours per response for registration e instructions and completing the necessary forms. Send gestions for reducing the burden to: Director, OPPE Fashington, OC 20460. |
| | Certification with Respec | t to Citation o | Data |
| • • | e. Address, and Telephone Number
20. Route 14, Box 1517, Lake City, F1 32054 | | EPA Registration Number/File Symbol . 72977-E |
| Active Ingredient(s) and/or re | presentative rest compound(s) Silver & Citric Acid | | Date |
| General Use Patiern(5) (list | all those claimed for this product using 40 CFR Part 15
Manufacturing Use Product | 8)
 | Product Name Axen |
| NOTE: If your product is submit this form, You must s | a 100% repackaging of another purchased EPA-registe
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)(1)(F) and/or 3(c)(2)(B) of FIFAA are available and will
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| | | | Y |
| ignature . | my Joseph | 5/2/01 · | Typed or Printed Name and Title Henry Jacoby, Agent |

Front Panel Axen EPA File Symbol 72977-E revision May 2, 2001

AXEN®

Stabilized Ionic Silver
Hard Surface Disinfectant

Active Ingredient

| Silver* | 0.0012% |
|-------------------|---------------|
| Citric Acid | |
| Other Ingredients | |
| mot. | - 1 100 00009 |

* Electrolytically generated Silver ions

KEEP OUT OF REACH OF CHILDREN

CAUTION

EPA REG. No. 72977-E

EPA EST. No. xxxxx-x-xx

Manufactured by ETI H,O,

Route 14, P. O. Box1517 Lake City, FL 32024

Net Vol. 36 oz.

Back Panel Axen EPA File Symbol 72977-E Revised May 2, 2001

AXEN® Disinfectant Fump Spray kills bacteria on environmental hard surfaces (painted, tile, plastic, metal, glass, porcelain) in your home and public places. It eliminates germs and odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN® Disinfectant Pump Spray:

In empty garbage cans
In pet areas
In sick rooms
Under sinks

In diaper pails
In empty hampers
On doorknobs
In bathrooms

Fast/Easy/Effective: Use on finished surfaces in basements, closets, attics, laundry rooms, storage areas, vacation homes, boat interiors, shower stalls, and recycling bins. AXEN® Disinfectant Pump Spray is effective against Salmonella, Streptococcus, and Pseudomonas organisms.

Directions for Use

To disinfect, spray surface with AXEN® Disinfectant and let stand for 1 minute.

STORAGE AND DISPOSAL

| Storage | Do not contaminate water, food or feed by storage or disposal. |
|---------|---|
| 1 - 1 | Do not reuse container. Rinse thoroughly before discarding in trash or recycling. |

and the



Disinfection With Environmental Perspective

Rt. 14 Box 1517, Lake City, Fl 32024 V. 904-755-0389 FAX: 904-755-8642 E-Mail: microbio@alltel.net

Date: 4-27-2001

From: Andrew Arata

To: Henry Jacoby

Subject: Authorized Agent For ETI H20, Inc. EPA Matters

To Whom it may concern:

ETIH20, Inc. authorizes Henry Jacoby, Regulatory Consultant, 6709 Ilex Court, New Market, MD 21774, to act on behalf of ETI H20, Inc., on all matters relating to regulatory actions and registrations before the US Environmental Protection Agency.

Sincerely:

Andrew B. Arata President, ETIH20, Inc.

July (). / / wh

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

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| Date | April 23, 2001 | | EPA Reg No./File Symbol | 72977-E | Page 1 of |
| Applicant's/Registrant's Name & Ac | ddiess | | Product | | |
| ET | I H2O, Route 14, Box 1517, Lake City, Fl 32054 | | | Axen | |
| Ingredient Silver & Citric Acid | | | | | |
| Guideline Reference Number | Guideline Study Name | MRID Number | Submitter | Statu | s Note |
| SERIES 830 | Product Identity & Composition | 45016502 | ETI H2O | 0 | wn Accepted |
| OPPTS 830.6317 | Storage Stability | 45182002 | ETI H2O | 0 | wn Accepted |
| OPPTS 870.2400 | Acute Eye Irritation | 46046501 | ETI H2O | 0 | wn Accepted |
| OPP 158.640 | Product Performance (AOAC use dilution test) | 45016906 | ETI H2O | | wn Accepted |
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| <u> </u> | Electronic and Paper versions avgilable. Submit only Paper version | | Henry Jacoby, Agent | Agency Internat U | 5/2/01 |





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|)ale | April'23, 2001 | | EPA Reg No./File Symbol | 72977-E | Page t of L |
| pplicant's/Registrant's Name & / | Address | | Product | • | |
| E | FI H2O, Route 14, Box 1517, Lake City, FI 3 | 32054 | | Axen | |
| ngredient Silver & Citric Acid |] | | | | |
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| Signature | Chan Vand | | Name and Title Henry Jacoby, Agent | . 1 | Date: |

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Form Approved OMB No. 2070-0060



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| | | EPA Reg No./File Symbol 729 | 77-E | Page 1 of 2 | |
| | | Product | | | |
| ETI | H2O, Route 14, Box 1517, Lake City, FL 32054 | | Axen | | .,,, |
| Ingredient Citric Acid | | _ | · | | |
| Guideline Relerance Number | Guideline Study Name | MRID Number | Submitter | Status | Note |
| OPPTS Series 830 | Group B - Physical/Chemical Properties | N/A | Reregistration Eligibility Document | PL | } |
| OPPTS 870.1100 | Acute Oral Toxicity | N/A | 0 | | ì |
| OPPTS 870.1200 | Acute Dermal Toxicity | N/A | и | n | j. |
| OPPTS 870.1300 | Acute Inhalation Toxicity | N/A | н | 11 | 1 |
| OPPTS 870.2400 | Acute Eye Irritation | N/A | | ч |) |
| OPPTS 870.2500 | Acute Dermal Irritation | N/A | н | н | <u> </u> |
| OPPTS 870.2600 | Skin Sensitization Test | N/A | 0 | <u> </u> | 1 |
| OFPTS 850.2100 | Avian Acute Oral Toxicity Test | N/A | ь | | 1 |
| OPPTS 850,2200 | Avian Dietary Toxicity Test | N/A | <u> </u> | 144 | 1 |
| OPPTS 850,1075 | Fish Acute Toxicity Test, freshwater and marine | N/A | • . | · · · · · · · · · · · · · · · · · · · | ĵ |
| OPPTS 850.1010 | Aquatic Invertobrate Acute Toxicity Test, Daphnia | N/A | . " | n |] |
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| Signature | Exec Vacalia | | Name and Title Afterwards, President | | 5/02/0 |

1. Reregistration Eligibility Document - Citric Acid, Prevention, Pesticides And Toxic Substances, EPA-738-F-92-017, June 1992, Page 5.

"In considering citric acid for reregistration eligibility, the Agency believes it is an active ingredient that should be considered for this broad waiver of the generic data requirements. The considerations that lead the Agency to this conclusion are as follows:

The U. S. FDA lists citric acid as a multiple purpose "generally recognized as safe" (GRAS) food substance (21 CFR part 182). Citric acid is also approved by the Joint FAO/WHO Expert Committee on Food Additives for use in foods without limitation.

There is no indication in the available information on citric acid as provided by the registrant that suggests that citric acid would constitute a hazard to the public or to the environment. Citric acid is widely distributed in plants and animals and occurs naturally in foods in substantial quantities. It is a well-known intermediate in carbohydrate metabolism and ingested citrate is considered to be completely metabolized.

Citric acid from living organisms is found naturally in soil and water. Citrates leached from rotting vegetation and produced by microorganisms have been detected at low levels through the ecosystem. Citric acid degrades readily when in contact with a variety of microorganisms that are found in soil, natural waters or sewage treatment systems. There is negligible human and environmental exposure to citric acid as a pesticide as a result of current registered use patterns, e.g., it has a low use rate and frequency of application.

No reports or adverse effects have been submitted to the Agency for this active ingredient. Citric acid, is, however, a severe eye irritant and moderate skin irritant, so appropriate label precautions are necessary. There is no indication of any other significant adverse effects from citric acid to humans or the environment associated with its use as a pesticide.

Based on these factors the Agency does not believe generic data beyond those data required to satisfy basic product identity and chemistry questions ... are necessary to determine if the current registered uses of this active ingredient pose unreasonable risks to humans or the environment. Therefore, the Agency waived all generic data requirements except the basic product identity and chemistry data. The Agency believes that, based on the above factors, the registered uses of citric acid do not pose unreasonable risks to humans or the environment."

The present application does not result in an use that is substantially different from those already registered. Therefor the Agency's rationale and waiver is applicable. No additional data are required.

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|)ale | April 16, 2001 | | EPA Reg No./File Symbol 7297 | 7-E | Page 1 of 2 |
| Applicant's/Registrant's Name & Ad | dress | * | Product | | |
| ETI | H2O, Route 14, Box 1517, Lake City, FL 32054 | | - Axen | | |
| ngredient Silver | | _ | | | |
| Suideline Reference Number | Guideline Study Name | MRID Number | Submitter | Status | Note |
| OPPTS Series 830 | Group B - Physical/Chemical Properties | N/A | Reregistration Eligibility Document | PL | 1 |
| OPPTS 870.1100 | Acute Oral Toxicity | N/A | " | н | 1 |
| ÓPPTS 870,1200 | Acute Dermal Toxicity | N/A | | 0 | 1 |
| OPPTS 870.1300 | Acute Inhabition Toxicity | N/A | | | 1 |
| OPPTS 870.2400 | Acute Eye Irritation | N/A | | 14 | <u> </u> |
| OPPTS 870.2500 | Acute Dermal Irritation | N/A | " | 14 | 1 |
| OPPT\$ 870.2600 | Skin Sensitization Test | N/A | | 94 | 1 |
| OPPTS 850.2100 | Avian Acute Oral Toxicity Test | N/A | Mason Chemical Company | PAY | <u> </u> |
| OPPTS 850.2200 | Avian Dictary Toxicity Test | N/A | Mason Chemical Company | PAY | <u> </u> |
| OPPTS 850.1075 | Fish Acute Toxicity Test, freshwater and marine | N/A | Reregistration Eligibility Document | PL | 1 |
| OPPTS \$50,1010 | Aquatic Invertebrate Acute Toxicity Test, Daphnia | N/A | | | |
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| Signature | Mary Vacoly | | Name and Title Henry Jacoby, Agent | | Date 3/2/01 |
| EPA Form 8570-35 (9-97) (| lectionic and Paper versions available. Submit only Paper version. | | | Internal Use Cop | y |

1. Reregistration Eligibility Document and Fact Sheet-Silver, Prevention, Pesticides And Toxic Substances, EPA-xxx-x-xx-xxx, ???month??? 1992. Page 2 of the Fact Sheet.

"Most usually-required toxicity and exposure studies have been waived for silver since adequate published information is available." See References on pages 34 through 37 of the RED document on silver.

2. My company is will to develop and submit the data required by EPA under the authority of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), when the Agency formally requests such data from companies with currently registered products containing an unregistered source of silver. However, my company would prefer to enter into an agreement with one or more registrants to develop jointly or share in the cost of developing the data, if necessary.

REQUEST FOR A WAIVER FROM THE REQUIREMENT OF

OPPTS 870.1300

ACUTE INHALATION TOXICITY TESTING

ETI H₂0 requests a waiver from the requirement of submitting the Acute Inhalation Toxicity Testing (OPPTS 870.1300) for their product **AXEN**[®]. This waiver is based on a number of factors: formulation, low toxicity, packaging, and aerodynamic properties.

The formulation of $AXEN^{\mathfrak{D}}$ is predominantly remaining ingredients are citric acid. and ionic silver. This formulation tested out as category IV for acute oral, acute dermal, eye and skin irritation toxicity tests and negative as a skin sensitizer. are present at of the formulation. The only chemical, beside present at a significant level is citric acid (~5% w/w). Information from toxnet on the toxic effects of citric acid states "A moderately strong acid with irritant and allergenic properties. It is generally considered harmless except in large ingestions or chronic exposure." This is not the case with AXEN®. None of the of components present in the formulation are at a level to result in a significant toxic response. At 100% exposure of the product to rats in the inhalation study the only likely effect to be observed might be mild tissue irritation as a result of the acidic effects since the formulation has a pH of 1.79.

The product will be packaged as a ready-to-use spray. The spray utilized is a trigger spray similar to those employed with many of the household cleaning products. The particular trigger spray being used with **AXEN**® will generate a stream of product at ~1-2 mL per squeeze. The nozzle will be non-adjustable.

The application of this product using the trigger spray with its direct stream is not likely to produce a significant amount of aerosol particles. And of the aerosol particle produced, little or none of them will be less than 100μ in size. Since the product is predominantly composed of with no volatile components, its density is very close to that of Because of the low amounts of components, other than and their relatively low volatility, any aerosol particles produced are likely to behave aerodynamically similar to that of

ু কার্য এবং বিজ্ঞান্ত In summary, this waiver request is based on the following facts:

- 1. None of the components in the formulation are present at a concentrate sufficiently high to result in a metabolic toxic effect when inhaled. The pH of the formulation is in the range that might result in mild irritation to the mucous membranes.
- 2. There is little or no reason to expect a large percentage of respirable particles being produced by the trigger spray application of this product.
- 3. Carrying out an acute inhalation toxicity test with this product would not significantly alter the present knowledge base or effect a change in the precautionary labeling, since a concentration of citric acid many time higher than present in AXEN® would only be moderately irritating at worst.

Hazardous Substances Data Bank Report, page 3 of 21, Clinical Effects, 0.2.1.1, page 3 of 21, http://toxnet.nlm.nih.gov



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| Certification with Respec | t to Citation of | Data |
| Applicant's/Registrant's Name, Address, and Telephone Number
ETI H2O, Route 14, Box 1517, Lake City, FL 32054 | | EPA Registration Number/File Symbol 72977-E |
| Active Ingredient(s) and/or representative test compound(s) Silver & Citric Acid | | O a l a |
| General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158
Manufacturing Use Product |) . | Produci Name
Axen |
| NOTE: If your product is a 100% repackaging of another purchased EPA-register submit this form. You must submit the Formulator's Exemption Statement (EPA Form | | or all the same uses on your label, you do not need to |
| I am responding to a Data-Call-In Notice, and have included with this form a be used for this purpose). | list of companies se | nt offers of compensation (the Data Matrix form should |
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| [Required if using the cite-all method or when using the cite-all option under the sele | | |
| SECTION III: CERT | IFICATION | |
| I certify that this application for registration, this form for reregistration, or the application for registration, the form for reregistration, or the Data-Call-In response, to indicated in Section I, this application is supported by all data in the Agency's files the substantially similar product, or one or more of the ingredients in this product; and (2) requirements in effect on the date of approval of this application if the application sources. I certify that for each exclusive use study cited in support of this registration me written permission of the original data submitter to cite that study. I certify that for each study cited in support of this registration or reregistration with the word of the permission of the original data submitter to use the compensation have expired for the study; (d) the study is in the public literature; or (e) offered (1) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(amount and terms of compensation, if any, to be paid for the use of the study. I certify that in all instances where an offer of compensation is required, con accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will evidence to the Agency upon request. I understand that the Agency may initiate action FIFRA. | addition, if the cite-
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into deny, cancel or its | all option or cite-all option under the selective method is operlies or effects of this product or an identical or . I would be required to be submitted under the data attion of a product of identical or similar composition and at I am the original data submitter or that I have obtained at I am the original data submitter or that I have obtained thusive use study, either: (a) I am the original data his application; (c) all periods of eligibility for filing the company that submitted the study and have not (ii) to commence negotiations to determine the asy compensation and evidence of their delivery in Agency upon request. Should I fail to produce such suspend the regretables of my product in conformity with |
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knowingly false or misleading statement may be punishable by fine or impriso | | |
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1. Reregistration Eligibility Document and Fact Sheet-Silver, Prevention, Pesticides And Toxic Substances, EPA-xxx-x-xx-xxx, ???month??? 1992. Page 2 of the Fact Sheet.

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| Date April 23, 2001 | | EPA Reg No./File Symbol | 72977- | E | Page 1 of 1 | |
| Appficant's/Registrant's Name & Address ETI H2O, Route 14, Box 1517, Lake City, Ft. 32054 | | | Product
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PREPARED BY HENRY JACOBY (301-865-9090)

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| The material not included contains the following type of information: |
| Identity of product inert ingredients. |
| Identity of product impurities. |
| Description of the product manufacturing process. |
| Description of quality control procedures. |
| Identity of the source of product ingredients. |
| Sales or other commercial/financial information. |
| A draft product label. |
| The product confidential statement of formula. |
| Information about a pending registration action. |
| FIFRA registration data. |
| The document is a duplicate of page(s) $95-99$. |
| The document is not responsive to the request. |
| |
| The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request. |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary folims. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not

| | DAT | A MATRIX | • | | |
|---|---|-------------|--|----------|-------------|
| Date April 16, 2001 Applicant's/Registrant's Name & Address | | | EPA Reg No./File Symbol 7 | 2977-尼 | Page I of 2 |
| | | | Product Axcii | | |
| ETT H2O, Route 14, Box 1517, Lake City, FL 32054 | | | | | |
| ngredient Citric Acid | · | | | | |
| Buideline Reference Number | Guideline Study Name | MRID Number | Submiller | Status | Note |
| OPPTS Series 830 | Group B - Physical/Chemical Properties | N/A | Reregistration Eligibility Document | PL | |
| OPPTS 870.1100 | Acute Oral Toxicity | N/A | 0 | | |
| OPPTS 870.1200 | Acute Dermal Toxicity | N/A_ | н | | |
| OPPTS 870.1300 | Acute Inhalation Toxicity | N/A | " | | <u> </u> |
| OPPTS 870.2400 | Acute Eye Irritation | N/A | | | |
| OPPTS 870.2500 | Acute Dermal Irritation | N/A | " | | 1 |
| OPPTS 870.2600 | Skin Sensitization Test | N/A | 1 | | _ |
| OPPTG 850.2100 | Avian Acute Oral Toxicity Test | N/A | н | <u> </u> | |
| OPPTS 850.2200 | Avian Dietary Toxicity Test | N/A | li li | | |
| OPPTS 850.1075 | Fish Acute Toxicity Test, freshwater and marine | N/A | 41 | | |
| OPPTS 850.1010 | Aquatic Invertebrate Acute Toxicity Test, Daphnia | N/A | " | | 1 . |
| | | | | | |
| <u> </u> | | | | | |
| Signature Laroles | | | Name and little Activit Antirew Arata, President | | 0ale 5/02/0 |

Reregistration Eligibility Document - Citric Acid,
 Prevention, Pesticides And Toxic Substances, EPA-738-F-92-017,
 June 1992, Page 5.

"In considering citric acid for reregistration eligibility, the Agency believes it is an active ingredient that should be considered for this broad waiver of the generic data requirements. The considerations that lead the Agency to this conclusion are as follows:

The U. S. FDA lists citric acid as a multiple purpose "generally recognized as safe" (GRAS) food substance (21 CFR part 182). Citric acid is also approved by the Joint FAO/WHO Expert Committee on Food Additives for use in foods without limitation.

There is no indication in the available information on citric acid as provided by the registrant that suggests that citric acid would constitute a hazard to the public or to the environment. Citric acid is widely distributed in plants and animals and occurs naturally in foods in substantial quantities. It is a well-known intermediate in carbohydrate metabolism and ingested citrate is considered to be completely metabolized.

Citric acid from living organisms is found naturally in soil and water. Citrates leached from rotting vegetation and produced by microorganisms have been detected at low levels through the ecosystem. Citric acid degrades readily when in contact with a variety of microorganisms that are found in soil, natural waters or sewage treatment systems. There is negligible human and environmental exposure to citric acid as a pesticide as a result or current registered use patterns, e.g., it has a low use rate and frequency of application.

No reports or adverse effects have been submitted to the Agency for this active ingredient. Citric acid, is, however, a severe eye irritant and moderate skin irritant, so appropriate label precautions are necessary. There is no indication of any other significant adverse effects from citric acid to humans or the environment associated with its use as a pesticide.

Based on these factors the Agency does not believe generic data beyond those data required to satisfy basic product identity and chemistry questions ... are necessary to determine if the current registered uses of this active ingredient pose unreasonable risks to humans or the environment. Therefore, the Agency waived all generic data requirements except the basic product identity and chemistry data. The Agency believes that, based on the above factors, the registered uses of citric acid do not pose unreasonable risks to humans or the environment."

The present application does not result in an use that is substantially different from those already registered. Therefor the Agency's rationale and waiver is applicable. No additional data are required.



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| | DAT | A MATRIX | | | |
|--|--|---------------------|-------------------------------------|-------------|------------|
| Date | April 16, 2001 | | EPA Reg No./File Symbol 729 | 77-E | Page of |
| Applicant's/Registrant's Name & Address | | Product Axen | | | |
| ETI H2O, Route 14, Box 1517, Lake City, FL 32054 | | | | | |
| ingredient Silver | | | | | |
| Guideline Relerence Number | Guideline Study Name | MAID Number | Submitter | Status | Note |
| OPPTS Series 830 | Group B - Physical/Chemical Properties | N/A | Reregistration Eligibility Document | PL | 1 |
| OPPTS 870,1100 | Acute Oral Toxicity | N/A | | | [|
| OPPTS 870.1200 | Acute Dermal Toxicity | N/A | <u> </u> | | 1 |
| OPPTS 870.1300 | Acute Inhalation Toxicity | N/A | | | 1 |
| OPPTS 870.2400 | Acute Eye Irritation | N/A | | | 1 |
| OPPTS 870.2500 | Acute Dermal Irritation | N/A | | - 0 | 1 |
| OPPTS 870.2600 | Skin Sensitization Test | N/A | d | " | 1 |
| OPPTS 850.2100 | Avian Acute Oral Toxicity Test | N/A | Mason Chemical Company | PAY | |
| OPPTS 850.2200 | Avian Dietary Toxicity Test | N/A | Mason Chemical Company | PAY | |
| OPPTS 850.1075 | Fish Acute Toxicity Test, freshwater and marine | N/A | Reregistration Eligibility Document | PL. | [1 |
| OPPTS 850.1010 | Aquatic Invertebrate Acute Toxicity Test, Daphnia | N/A | | | I |
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| - <u>i-i-i-i-i-i-i-i-i-i-i-i-i-i-i-i-i-i-i</u> | | | | | |
| Signature | | | Name and little | | Date //_ / |
| | lectionic and Pappy versions available. Submit only Paper version. | Henry Jacoby, Agent | | 3/2/01 | |

1. Reregistration Eligibility Document and Fact Sheet-Silver, Prevention, Pesticides And Toxic Substances, EPA-xxx-x-xx-xxx, ???month??? 1992. Page 2 of the Fact Sheet.

"Most usually-required toxicity and exposure studies have been waived for silver since adequate published information is available." See References on pages 34 through 37 of the RED document on silver.

2. My company is will to develop and submit the data required by EPA under the authority of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), when the Agency formally requests such data from companies with currently registered products containing an unregistered source of silver. However, my company would prefer to enter into an agreement with one or more registrants to develop jointly or share in the cost of developing the data, if necessary.

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CALLED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W. WASHINGTON, D.C. 20460

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| | DA | ATA MATRIX | | | | |
|---|--|-------------|-------------------------|---------------------------------------|-------------|--|
| Date | April 23, 2001 | | ERA Reg No./File Symbol | 72977-E | , | Page i of I |
| Applicant's/Registrant's Name & Address | | | Product | | | |
| E'l' | l H2O, Route 14, Box 1517, Lake City, Fl 32054 | | | Axen | <u>,,,</u> | |
| Ingredient Silver & Citric Acid | | | | | | · • · · · · · · · · · · · · · · · · · · |
| Guideline Reference Number | Guideline Study Name | MRID Number | Submitter | | Status | Note |
| SERIES 830 | Product Identity & Composition | 45016502 | ETI H2O | | 0.mu | Accepted |
| OPPTS 830.6317 | Storage Stability | 45182002 | ETI H2O | | own | Accepted |
| OFPTS 870.2400 | Acute Eye Irritation | 46046501 | ETI H2O | | own | Accepted |
| OPP 158.640 | Product Performance (AOAC use dilution test) | 45016906 | ЕТІ Н2О | | own | Accepted |
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| | Henry Kacoli | | Henry Jacoby, Agent " | | | 5/2/01 |

PREPARED BY HENRY JACOBY (301-865-9000)

ENVIRON. FATE FISH/WILDLIFE

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| | Identity of product impurities. |
| | Description of the product manufacturing process. |
| | Description of quality control procedures. |
| | Identity of the source of product ingredients. |
| | Sales or other commercial/financial information. |
| _ | A draft product label. |
| _ | The product confidential statement of formula. |
| _ | Information about a pending registration action. |
| _ | FIFRA registration data. |
| _ | The document is a duplicate of page(s) |
| - | The document is not responsive to the request. |
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RESPONSE CODE /3 RESPONSE DATE MAR I 5 2001

ETI H₂O Route 14, Box 1517 zLake City, FL 32054

Attention: John W. Kennedy, Agent

Subject: Axenohl

EPA File Symbol 72977-R

Application Dated December 8, 2000

Axen
EPA File Symbol 72977-E
Application Dated December 8, 2000

A review of your application package has determined that additional information will be required in order for us to continue processing your application. The following information must be corrected and submitted.

ACUTE TOXICOLOGY

The Agency has completed its review of the submitted acute toxicity studies and the comments are outlined below.

- 1. The acute oral toxicity, acute dermal toxicity, primary eye irritation and primary skin irritation studies are acceptable.
- 2. No acute inhalation toxicity study or waiver request for this study was included for this submission. In order to obtain Precautionary Labeling for this product, you must address the requirements for this study or submit justification as to why this study was not submitted.
- 3. The acute toxicity profile for EPA File Symbol 72977-R is listed below:

Acute oral toxicity IV Acceptable
Acute dermal toxicity IV Acceptable
Acute inhalation toxicity Not submitted
Primary eye irritation IV Acceptable
Primary skin irritation IV Acceptable
Dermal sensitization Non-sensitizer Acceptable

PRODUCT CHEMISTRY (AXENOHL)

The revised Basic Confidential Statement of Formula dated December 5, 2000 is incomplete and is not acceptable. The items listed below must be addressed on your CSF and submitted for our review.

FINDINGS:

- 1. The formula weight for the electrolytically generated silver in the Basic CSF must be increased from an in item 13a in order for the percentage weight to equal 0.2400% as given in item 13b and on the product label. Based on the 12/5/00 CSF, the percent by weight of silver is 0.2356%. It is suggested that the weight of the to compensate for the increased use of silver.
- 2. The ingredient statement on product label for Axenohl must be revised to read as follows:

| Active Ingredients: | |
|---------------------|----------|
| *Silver | 0.2400% |
| Citric Acid | 20.6600% |
| Other Ingredients: | 79.1000% |
| Total | |
| | 11 |

^{*}ionic silver generated electrolytically

Silver not silver citrate should be declared as an active ingredient. Additionally, due to the high concentration of citric acid or anhydrous citric acide present in this formulation, citric acid must be identified and declared as an active ingredient. At the levels utilized citric acid unquestionably provides antimicrobial activity. This assignment of citric acid as an active ingredient is required, despite of the fact that citric acid also functions as a stabilizer in this formulation.

- 3. The correct spelling of this product is Axenohl and not Axenhol as given in the application (EPA Form 8570-1).
- 4. Identify citric acid or its synonym, anhydrous citric acid, as an active ingredient in the CSF.

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5. All other elements of the CSF were acceptable.

76

PRODUCT CHEMISTRY (AXEN)

The revised Basic Confidential Statement of Formula dated December 5, 2000 is incomplete and is not acceptable. The items listed below must be addressed on your CSF and submitted for our review.

FINDINGS:

1. The ingredient statement on product label for Axenohl must be revised to read as follows:

| Active Ingredients: | |
|--|-----------|
| *Silver | 0.0012% |
| Citric Acid | 4.8387% |
| Other Ingredients: | 95.1600% |
| Total | 100.0000% |
| *ionic silver generated electrolytically | |

Due to the high concentration of citrate acid or anhydrous citric acid present in this formulation, citric acid must be identified and declared as an active ingredient. At these levels citric unquestionably provides antimicrobial activity. This assignment of citric acid as an active ingredient is required, despite of the fact that citric acid also functions as a stabilizer in this

formulation.

2. The Basic CSF for Axen must be revised to incorporate the increase in silver and which was recommended for the 12/5/00 Axenol CSF in the chemistry review for Axenohl dated 3/9/01.

- 3. Identify citric acid or its synonym, anhydrous citric acid, as an active ingredient in the CSF.
- 4. All other elements, such as the certified limits, of the CSF were acceptable.

EFFICACY

The company has not complied with our request to correct the deficiencies as outlined in our letter dated November 29, 2000 under "SUMMARY OF INFORMATION REVIEWED AND FINDINGS/CONCLUSIONS.

137

DATA MATRIX

You are reminded that a new data compensation form listing silver as the active and a data matrix for the Technical Grade Silver Active Ingredient must be submitted for both the Axen and Axenohl products. You must also submit appropriate data compensation paperwork for the Citric Acid A.I. If you are using an unregistered source of active for the Citric Acid under the Selective Method of Support, you must submit a data matrix for the TGAI Citric Acid.

LABELING

The Agency reserves full labeling review at this time until the above deficiencies have been resolved. Just a reminder that additional information/data may be required to support your application after the corrected efficacy data have been submitted and reviewed.

This letter does not constitute registration and the product may not be lawfully marketed until all the required information has been submitted for review and found acceptable.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,

Marshall Swindell

Acting Product Manager 33

Regulatory Management Branch 1

Antimicrobial Division (7510C)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY :- WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: Product Chemistry Review of Axen

DP Barcode: D271464

Reg. No. or File Symbol: 72977-E

Manufacturing-use []

End-use Product [X]

Active Ingredient Composition:

*Silver0.0012%

* electrolytically generated silver ions
(as per undated product label which was post- dated 3/9/01 by the reviewer of this submission)

TO:

Marshall Swindell PM 33 ·

FROM:

Alex Traska, Chemist

Product Science Branch, CT Team

Antimicrobials Division (7510C)

THRU:

Karen P. Hicks, CT Team Leader

Product Science Branch

Antimicrobials Division (7510C)

THRU:

Michele E. Wingfield, Chief

Product Science Branch

Antimicrobials Division (7510 C)

BACKGROUND:

This re- submission, in support of the new product registration of Axen (EPA Reg. No. 72977-E) an end-use hard surface disinfectant, was submitted by John W. Kennedy Consultants, Inc. on behalf of the registrant, ETI H2O, Inc.

The registrant is responding to the November 29, 2000 Agency letter in which deficiencies regarding **Axen** and its manufacturing-use counterpart were delineated. In this re-submission a revised CSF and additional information was provided for both **Axen** and **Axench!**.

The following documents were submitted and examined in the chemistry review of this submission: agent's cover letter dated December 7, 2000, application covering this re-submission dated 12/8/00, revised Basic Formulation CSF for Axen dated 12/5/00, revised Basic Formulation CSF for Axenohl dated 12/5/00, Agency letter dated November 29, 2000 and undated product label which was post dated 3/9/01by the reviewer.

FINDINGS:

1. The ingredient statement on product label for **Axen** must be revised to read as follows:

| Active ingredients. | 1 |
|--|-----------|
| *Silver | 0.0012% |
| Citric Acid | 4.8387% |
| Other Ingredients: | 95.1601% |
| Total | 100.0000% |
| *ionic silver generated electrolytically | |

Due to the high concentration of citric acid or anhydrous citric acid present in this formulation, citric acid must be identified and declared as an active ingredient. At these levels citric acid unquestionably provides antimicrobial activity. This assignment of citric acid as an active ingredient is required, despite of the fact that citric acid also functions as a stabilizer in this formulation.

- 2. The Basic CSF for Axen must be revised to incorporate the increase in silver and which was recommended for the 12/5/00 Axenohl CSF in the chemistry review for Axenohl dated 3/9/01.
- 3. Identify citric acid or its synonym, anhydrous citric acid, as an active ingredient in the CSF.
- 4. All other elements, such as the certified limits, of the CSF were acceptable.

(30

RECOMMENDATIONS:

This re-submission, in support of the new product registration of Axen, is not accepted.

Issues discussed under Findings must be addressed by the registrant.

03/09/01 AT

DP BARCODE: D271464

CASE: 068118 DATA PACKAGE RECORD SUBMISSION: S590089 BEAN SHEET

BEAN SHEET

DATE: 12/27/00 Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 189 RESE FQPA-OC-ME TOO CHEMICALS:

ID#: 072977-E AXEN

COMPANY: 072977 ETI H2O, INC.

PRODUCT MANAGER: 33 MARSHALL SWINDELL , 703-308-6341 ROOM: CS1 6B
DM TEAM REVIEWER: MARTHA TERRY 703-308-6217 ROOM: CS1 6W10

RECEIVED DATE: 12/12/00 DUE OUT DATE: 04/11/01

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 271464 EXPEDITE: N DATE SENT: 12/27/00 DATE RET.: / / CHEMICAL:

TYPE: 001

CHEMICAL:

CSF: Y LABEL: Y

ASSIGNED TO DATE IN DATE OUT DIV: AD 10/29/00 / / ADMIN DUE DATE: 04/01/01 NEGOT DATE: 3/11/01 PROJ DATE: Z /27/6/

10/09/00 BRAN: PSB SECT: CTT REVR: CLCX 1/2/01 CONTR:

* * * DATA REVIEW INSTRUCTIONS * * *

Please review the corrected CSF based on the Agency's comments in letter dated 11/29/00. Attached are copies of the previous CSF, label and current CSF.

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC BRANCH/SECTION DATE OUT DUE BACK INS CSF LABEL

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| | | Application for | Pesticide - Sec | tion (| The second secon |
| . Company/Product Numb | | | 2. EPA Product Man | | 3. Proposed Classification |
| EPA F | ile Symbol | 72977-E | Marshall S | | |
| Company/Product (Name | , | | PM# | : | None Restricted |
| | <u> </u> | <u>EN</u> | 33 | : | :
 |
| Name and Address of A | pplicant <i>(Include ZIP</i> C | ode) | | | with FIFRA Section 3(c)(3) |
| ETIH | | | (b)(i), my product to: | is similar or identical | in composition and labeling |
| Rt. 14 | Box 1517 | eren mil | EPA Reg. No. | ! | |
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John W. Kennedy Consultants

13 "C" Street Suite G Laurel, MD 20707 Phone: (301) 490-1600 Fax: (301) 490-5793

E-MAIL: John Flenn oder Committanze (Elitochia): done

December 7, 2000

Marshall Swindell
Product Manager 33
Antimicrobial Biogram Division (H7505C)
U. S. Environmental Protection Agency
Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202
Attn: Martha Terry

Subject:

Your letter of 11/29/00

<u>Axen</u>

EPA File symbol No. 72977-E

Axenohl

EPA File symbol No. 72977-R

142 To 150

Dear Mr. Swindell,

JWKC Represents ETI-H20. Dr. Ed Woolson has been the primary contact with ETI-H20 and we are responding to the subject letter.

Enclosed is the revised CSF for both Axen and Axenohl. The revision has taken into account the comments submitted in the chemistry review. The main function in the formulation is to keep the silver in solution. We request that citric acid be maintained as a stabilizer. At this time, ETIH2O wishes to drop the efficacy study for Enterococcus faecium since it is not necessary for the hard surface disinfectant registration.

We have not received the review for the hard surface disinfectant study run by

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"An acute dermal toxicity test was conducted with rats to determine the potential for Axenohl to produce toxicity from a single topical application. Based on the results of this study, the single dose acute dermal LD50 of the test substance is greater than 5,000 mg/kg of body weight. ...All animals survived, gained weight and appeared active and healthy. There were no signs of gross toxicity, adverse pharmacologic effects or abnormal behavior. Gross necropsy findings at terminal sacrifice were unremarkable."

Primary Eye Irritation Study in Rabbits (MRID 45016903).

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These studies may have been reviewed at this point.

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Therefore, we request that the information include our comments and be reviewed by EPA's own in-house reviewers in the interest of saving time since the data is so clear that it passes the hard surface disinfectant criteria. I trust that this could by done with a minimum of time delay since this registration has been pending for over one year since it was initially submitted.

We appreciate very much your assistance in performing an expedited review and resolution for registration of Axen and Axenohl.

Thank you

John W. Kennedy



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

NOV 2 9 2000

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

ET1 H₂O Route 14, Box 1517 Lake City, FL 32054

Attention: John W. Kennedy, Agent

Subject: Axen

EPA File Symbol Number 72977-E Your Application Dated June 16th, 2000

Axenhol
EPA File Symbol Number 72977-R
Your Application Dated June 16th, 2000

A review of your application packages has determined that additional information will be required in order for us to continue processing these applications.

PRODUCT CHEMISTRY/CSF FOR AXEN, EPA FILE SYMBOL 72977-E

- 1. The revised Confidential Statement of Formula dated June 23rd, 2000, is incomplete for the following reasons.
 - A. The amount of silver given in item 13a of the CSF is not consistent with the percentage of the silver shown in item 13b. This inconsistency must be resolved.
 - B. Item 17 of the CSF was not completed as required.
 - C. The nominal concentration of 0.0010% for silver given in item 13b of the CSF does agree with the label declaration of 0.0012%.
 - D. Citric acid at a 4.8% level in the formulation cannot be justified as merely a stabilizing agent, for 12 ppm of silver ion. At this concentration, citric acid has well established antibacterial properties, and as such must be identified and declared as an active ingredient. (If this is not the case, please support your position by justification)

- E. It is suggested that the Axen basic CSF be written to show both the starting materials which include Axenhol and the final composition of Axen, on dilution of Axenhol with and citric acid.
- F. A complete chemical composition of the component must be submitted for our review. The composition would include chemical names, CAS Reg. Nos. and percentages of each component.
- G. Submit a corrected CSF and in column 13b enter the percentages by weight for each component.
- 2. The 830 Test Guideline Series covering test protocols for color, pH, Physical state and density of Axen were acceptable.
- 3. The Accelerated Storage and Stability Study covering this product was also acceptable.

PRODUCT CHEMISTRY/CSF FOR AXENHOL, EPA FILE SYMBOL 72977-R

- 1. The revised Confidential Statement of Formula dated June 23rd, 2000, is incomplete for the following reasons.
 - A. The lower control limit for given in item 14b cannot be higher than the nominal concentration for as given in 13b.
 - B. The use of citric acid at concentration of 17.05% as a "stabilizer" for 0.240% of silver citrate. The high use levels of citric acid in both the Axenhol and Axen must also provide antimicrobial activity. Citric acid, therefore, should be treated as an active ingredient in the formulation and on the product labeling.
 - C. Submit a revised CSF and product labeling with the above corrections for our review for Axenhol.
- 2. The product chemistry and accelerated storage and stability data were completed and acceptable.

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John W. Kennedy Consultants

13 "C" Street Suite G Laurel, MD 20707 Phone: (301) 490-1600 Fax: (301) 490-5793

E-MAIL: John Konnocky Consumants (ill from an adum)

December 7, 2000

Marshall Swindell
Product Manager 33
Antimicrobial Biogram Division (H7505C)
U. S. Environmental Protection Agency
Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202
Attn: Martha Terry

Subject:

Your letter of 11/29/00

<u>Axen</u>

EPA File symbol No. 72977-E

Axenobl

EPA File symbol No. 72977-R

Section 1

Dear Mr. Swindell,

JWKC Represents ETI-H20. Dr. Ed Woolson has been the primary contact with ETI-H20 and we are responding to the subject letter.

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John W. Kennedy Consultants

13 "C" Street Suite G Laurel, MD 20707 Phone: (301) 490-1600 Fax: (301) 490-5793

E-MAIL: John Konnody Consultanza de Fresman de m

December 7, 2000

Marshall Swindell
Product Manager 33
Antimicrobial Biogram Division (H7505C)
U. S. Environmental Protection Agency
Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202
Attn: Martha Terry

Subject:

Your letter of 11/29/00

<u>Axen</u>

EPA File symbol No. 72977-E

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In addition to the lack of review for the hard surface disinfectant study, we have not received reviews on the acute studies either. The EPA may have already reviewed the submitted in November 1999 for the technical, the same time as the MicroBio Test study. They are the acute oral (MRID 45016901), acute dermal (MRID 45016902), eye irritation (MRID 45016903), skin irritation (MRID 45016904) and dermal sensitization (MRID 45016905). Axenohl is non-toxic and Product Safety Labs listed it as a category 4 compound with slight eye irritation. The eye irritation for Axen (MRID 45016907) has been reviewed and found acceptable.

Conclusions reached by Product Safety Labs are: Acute Oral Toxicity Study in Rats (MRID 45016901)

"An acute oral toxicity test was conducted with rats to determine the potential for Axenohl to produce toxicity from a single dose via the oral route. Based on the results of this study, the single dose acute oral LD50 of the test substance is greater than 5,000 mg/kg of bodyweight...All animals survived and appeared active and healthy throughout the study....There were no signs of gross toxicity, adverse pharmacologic effects or abnormal behavior. Gross necropsy findings at terminal sacrifice were unremarkable."

Acute Dermal Toxicity Study in Rats - Limit Test (MRID 45016902)

"An acute dermal toxicity test was conducted with rats to determine the potential for Axenohl to produce toxicity from a single topical application. Based on the results of this study, the single dose acute dermal LD50 of the test substance is greater than 5,000 mg/kg of body weight. ...All animals survived, gained weight and appeared active and healthy. There were no signs of gross toxicity, adverse pharmacologic effects or abnormal behavior. Gross necropsy findings at terminal sacrifice were unremarkable."

Primary Eye Irritation Study in Rabbits (MRID 45016903)

"A primary eve irritation test was conducted with rabbits to determine the product irritation from a single instillation via the ocular route. Based on the results of the study, the test substance is classified as mildly irritating to the eye....No corneal opacity or iritis was observed during the study...The overall incidence and severity of irritation decreased with time. All animals were free from ocular irritation within 72 hours."

Primary Skin Irritation Study in Rabbits (MRID 45016904)

W. Tark

"A primary skin irritation test was conducted with rabbits to determine the potential for Axenohl to produce irritation after a single topical application. Based on the results of this study, the test substance is classified as slightly irritating to the skin... Twenty-four hours after patch removal, well-defined erythema was observed at all three treated sites. Very slight edema was also evident the two rabbits. The overall incidence and severity of irritation decreased with time. All animals were free from irritation by Day 19 (study termination)... The Primary Dermal Irritation Index (PDII) calculated for this test substance was 1.7"

Dermal Sensitization Study in Guinea Pigs (Buehler Method) (MRID 45016905)
"A dermal sensitization test was conducted with guinea pigs to determine the potential for Axenohl to produce sensitization after repeated topical applications....Based on results of this study, the test substance is not considered to be a contact sensitizer. Historical data ...indicating a positive response to 0.04% DNCB in acetone validates the test system used in this study."

These studies may have been reviewed at this point.

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Therefore, we request that the information include our comments and be reviewed by EPA's own in-house reviewers in the interest of saving time since the data is so clear that it passes the hard surface disinfectant criteria. I trust that this could by done with a minimum of time delay since this registration has been pending for over one year since it was initially submitted.

We appreciate very much your assistance in performing an expedited review and resolution for registration of Axen and Axenohl.

Thank you

John W. Kennedy

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| | material not included contains the following type of rmation: |
| | _ Identity of product inert ingredients. |
| _ | _ Identity of product impurities. |
| | Description of the product manufacturing process. |
| | Description of quality control procedures. |
| | Identity of the source of product ingredients. |
| | Sales or other commercial/financial information. |
| | A draft product label. |
| | The product confidential statement of formula. |
| | Information about a pending registration action. |
| | FIFRA registration data. |
| | The document is a duplicate of page(s) $138-139$. |
| | The document is not responsive to the request. |
| | |



Stabilized Ionic Silver Hard Surface Disinfectant

AXEN ® Disinfectant Pump Spray Kills Viruses and bacteria on environmental surfaces in your home and public places. It eliminates germs and odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN ® Disinfectant Spray:

In empty garbage cans

In diaper pails

in pet areas

In empty hampers

In sick rooms

On doorknobs

Under sinks

Around toilet areas

Fast/Easy/Effective: Use on finished surfaces in basements, closets, attics, laundry rooms, storage areas, vacation homes, boat interiors, shower stalls and recycling bins. Excellent for controlling mold and mildew on mattresses, pillows and shower curtains.

Bacteria and Fungi:

Viruses:

Staph and Strep

Rhinovirus (the leading cause of the common cold)

Salmonella

Rotavirus (the leading cause of infectious diarrhea in children).

Respiratory Syncytial Virus (the leading cause of lower

Campylobacter

E. Coli

respiratory infections in children)
Poliovirus Type 1 - Adenovirus type 2

Athlete's foot fungus

Herpes simplex Virus types 1 & 2 - Hepatitis A

<u>Ingredients</u>

Active Ingredients:

* Silver

0.0012 %

Inert ingrediants

99.9988 %

Total:

100.0000 %

KEEP OUT OF REACH OF CHILDREN PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmfull if swallowed. Avoid contact with eyes. Wash thoroughy with soap and water after handling, Avoid contamination of food and feed. Do not leave package where children and animals may gain access.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES, flush with plenty of water. Get medical attention if imitation persists.

IF ON SKIN, wash with soap and water. Get medical attention if irritation persits.

electrolytically generated Silver ions

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RESPONSE CODE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

NOV 2 9 2000

OFFICE OF PREVENTION. PESTICIDE'S AND TOXIC SUBSTANCES

ETI H₂O Route 14, Box 1517 Lake City, FL 32054

Attention: John W. Kennedy, Agent

Subject: Axen

EPA File Symbol Number 72977-E Your Application Dated June 16th, 2000

Axenhol EPA File Symbol Number 72977-R Your Application Dated June 16th, 2000

A review of your application packages has determined that additional information will be required in order for us to continue processing these applications.

PRODUCT CHEMISTRY/CSF FOR AXEN, EPA FILE SYMBOL 72977-E

- 1 The revised Confidential Statement of Formula dated June 23rd, 2000, is incomplete for the following reasons.
 - A. The amount of silver given in item 13a of the CSF is not consistent with the percentage of the silver shown in item 13b. This inconsistency must be resolved.
 - B. Item 17 of the CSF was not completed as required.
 - C. The nominal concentration of 0.0010% for silver given in item 13b of the CSF does agree with the label declaration of 0.0012%.
 - D. Citric acid at a 4.8% level in the formulation cannot be justified as merely a stabilizing agent, for 12 ppm of silver ion. At this concentration, citric acid has well established antibacterial properties, and as such must be identified and declared as an active ingredient. (If this is not the case, please support your position by justification).

Page 2

- E. It is suggested that the Axen basic CSF be written to show both the starting materials which include Axenhol and the final composition of Axen, on dilution of Axenhol with and citric acid.
- F. A complete chemical composition of the component must be submitted for our review. The composition would include chemical names, CAS Reg. Nos. and percentages of each component.
- G. Submit a corrected CSF and in column 13b enter the percentages by weight for each component.
- 2. The 830 Test Guideline Series covering test protocols for color, pH, Physical state, and density of Axen were acceptable.
- 3. The Accelerated Storage and Stability Study covering this product was also acceptable.

PRODUCT CHEMISTRY/CSF FOR AXENHOL, EPA FILE SYMBOL 72977-R

- 1. The revised Confidential Statement of Formula dated June 23rd, 2000, is incomplete for the following reasons.
 - A. The lower control limit for given in item 14b cannot be higher than the nominal concentration for 13b.
 - B. The use of citric acid at concentration of 17.05% as a "stabilizer" for 0.24 % of silver citrate. The high use levels of citric acid in both the Axenhol and Axen must also provide antimicrobial activity. Citric acid, therefore, should be treated as an active ingredient in the formulation and on the product labeling.
 - C. Submit a revised CSF and product labeling with the above corrections for our review for Axenhol.
 - 2. The product chemistry and accelerated storage and stability data were completed and acceptable.

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EFFICACY:

The submitted efficacy data were found to be deficient and unacceptable. Please refer to the enclosed copy of the efficacy review under "SUMMARY OF INFORMATION REVIEWED AND FINDINGS/CONCLUSIONS" for your corrections and guidance.

LABELING:

The Agency reserves a full label review at this time until the above deficiencies have been resolved. Just a reminder that additional information/data may be required to support your application after the corrected efficacy data have been submitted and reviewed.

ADMINISTRATIVE (for both products):

195 M 5 6 A

Submit a data matrix for the Technical Grade Silver Active Ingredient. Refer the Agency's Silver RED document. You must also submit appropriate data compensation paperwork for the Citric Acid active ingredient. If you were using an unregistered source of citric acid and the Selective MOS, you must submit a data matrix for the TGAI Citric Acid.

If you have any questions concerning this letter, please contact Karen M. Leavy-Munk at (703)-308-6237.

Sincerely,

Marshall Swindell

Product Manager 33

Regulatory Management Branch I

Antimicrobial Division(7505C)

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs

ETI H20 RT. 14, BOX 1517 LAKE CITY, FL 32054

Report of Analysis for Compliance with PR Notice 86-5

42 " 25h

Thank you for your transmittal of 08/03/00. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

John W. Kennedy Consultants

13 °C" Street Suite G Laurel, MD 20707 Phone: (301) 490-1600 Fax: (301) 490-5793

E-MAIL: JohnKennedyConsultants@hotmail.com

June 16, 2000

To: Marshall Swindell

Product Manager 33
Antimicrobial Division (H7505C)
Office of Pesticide Programs
Environmental Protection Agency
Crystal Mall No. 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Subject:

AXEN - EPA File Symbol 72977-E

AXENOHL - EPA File Symbol 72977-R

Our Meetings of 6/15/00, Your Letter of 5/10/00 With

Reviews of 3/31/00 and 5/8/00 and Telephone Note of 4/19/00.

Dear Mr. Swindell

John W. Kennedy Consultants (JWKC) represents ETI H2O Inc. in all matters dealing with pesticide clearances.

AXEN is an end-use product formulated by the dilution of AXENOHL. The chemistry of AXEN passed the front end screen, then was reviewed by the EPA and found acceptable (your letter of May 10, 2000) except for minor deficiencies, which we have corrected. The product chemistry of AXENOHL did not make it through the front end screen because of minor discrepancies which we have corrected (see resubmission transmittal document). The data review of the chemistry for AXENOHL should not be necessary since the AXENOHL submission is almost exactly the same as the AXEN chemistry.

We have also included an Accelerated Storage Stability Study of AXENOHL and AXEN along with the chemical properties of AXENOHL. The same Transmittal Document has an efficacy study for AXENOHL.

The question of whether the active is a new chemical was addressed using the chemistry conducted by Bio-Analytical Services, Inc. under the direction of Dr. Ed Woolson.

AXENOHL and AXEN are a combination of electrolytically generated silver ions and stabilizers. The attached data demonstrated that the active is ionic silver (attachment #1)

We then discussed the claim that the formulation is a "stabilized ionic silver". There was agreement and the revised labels reflect the discussion (Attachment # 2)

Changes have been made to the Confidential Statement of the Formula (CSF) for AXEN as requested in your May 10, 2000 memo and EPA reviews of 5/08/00. We have also attached a new CSF for AXENOHL (Attachment # 3).

The efficacy studies was rejected [07] because of minor deficiencies which have been corrected (see Resumission Transmittal Document)

The toxicology review for AXEN included only the eye irritation study, which was found acceptable to the EPA in a memo dated 5/08/00. Subject D263138. As noted, the AXEN is the diluted form of AXENOHL and the full compliment of toxicology studies were conducted on the "technical" (AXENOHL). From our review of the studies, the AXENOHL should be category IV and therefore AXEN would also be category IV. The toxicology studies for AXENOHL can therefore satisfy the data requirements for AXEN.

The studies listed below are for AXENOHL ®, the technical concentrate (ca. 2,400 ppm Ag+):

| | Study | Our Conclusions | MRID Numbers |
|----|-----------------------|--|--------------|
| 1. | Acute oral Toxicity | LD50 >5,000 mg/Kg | 45016901 |
| 2. | Acute Dermal Toxicity | LD50>5,000 mg/Kg | 45016902 |
| 3. | Dermal Sensitization | Not a contact sensitizer | 45016905 |
| 4. | Ocular Irritation | Mildly irritation. Irritation | 45016903 |
| | | cleared by 72 hours. Category 3. | |
| 5. | Dermal Irritation | Slight irritation at 72 hours which cleared. | 45016904 |

For the diluted product, AXEN ®, at proposed use level concentrations (ca. 12 ppm Ag=) the ocular imitation study indicated the product to be practically non-irritating with the irrnation cleared by 24 hours. (MRID 450165-01)

<u>SUMMLARY</u>

The conclusion of the discussion was that the active is ionic silver and not a new chemical as an, "old" chemical, the following should be exempt from the following battery of studies rerequested in your previous letter:

- Subchronic Tox.
- 2. Chronic Tox (teratology)
- 3. Mutagenicity
- 4. Bird LD 50
- 5. Fish LC 50
- 4 6. Invertebrate LC50

A new philosophy is being discussed at the EPA and is leaning toward requiring a risk assessment for any new uses of a chemical. Mr. Swindell indicated that it may be necessary to conduct a risk assessment using additional toxicology studies. We do not believe this is necessary for the product with such low toxicity; especially since the use pattern is only as a hard surface disinfectant.

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Another important factor to be considered in the use of a product containing a silver ion is that this unique disinfectant can be rotated with other classes of disinfectants to control resistant organisms (bacteria, fungus, virus) in a integrated approach. Any risk assessment should take into account pesticides that can be used in rotation to prevent resistance from occurring.

We suggest that the EPA review both the AXEN and AXENOHL applications all at once since the "formulated" AXEN is only a dilution of the AXENOHL. In certain formulations, the addition of a low toxicity surfactant such as which is cleared by the EPA, may be added in small amounts and such a minor addition should not change the tox category for the product.

It should be pointed out that ionic silver is generated in swimming pool cleaning systems without any regulation. The proposed use of the subject products will be as a hard surface disinfectant at extremely low rates (12 ppm). The benefit involved using a metal ion at such low rates would rar exceed any risks for such a use and any risk assessment should take that fact into consideration.

John W. Kennedy

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| COMPANY NAME: John () | . Kennedy Con | sulmats | | |
| COMPANY CONTACT: John W |). Kennedy | (301) 490- | (600 | |
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W. Star



AXEN® Disinfectant Pump Spray Kills Viruses and bacteria on environmental surfaces in your home and public places. It eliminates germs and odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN® Disinfectant Spray:

in empty garbage cans

In diaper pails

In pet areas

In empty hampers

In sick rooms

On doorknobs

Under sinks

Around toilet areas

Fast/Easy/Effective: Use on finished surfaces in basements, closets, attics, laundry rooms, storage areas, vacation homes, boat interiors, shower stalls and recycling bins. Excellent for controlling mold and mildew on mattresses, pillows and shower curtains.

Bacteria and Fungi:

Viruses:

Staph and Strep

Rhinovirus (the leading cause of the common cold)

Salmonella

E. Coli

Rotavirus (the leading cause of infectious diarrhea in children)

Respiratory Syncytial Virus (the leading cause of lower respiratory infections in children)

Campylobacter

Poliovirus Type 1 - Adenovirus type 2

Athlete's foot fungus

Herpes simplex Virus types 1 & 2 - Hepatitis A

Ingredients

Active Ingredients:

* Silver

0.0012 %

Inert ingrediants

99.9988 %

Total:

100.0000 %

KEEP OUT OF REACH OF CHILDREN PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmfull if swallowed. Avoid contact with eyes. Wash thoroughy with soap and water after handling, Avoid contamination of food and feed. Do not leave package where children and animals may gain access.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES, flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN, wash with soap and water. Get medical attention if imitation persits.

10/10/00 A.T.

^{*} electrolytically generated Silver ions



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: Product Chemistry Review of Axen

DP Barcode: **D268937**

Reg. No. or File Symbol: 72977-E

Manufacturing-use []

End-use Product [X]

Active Ingredient Composition:

*Silver......0.0012%

*electrolytically generated silver ions

TO:

Marshall Swindell PM 33

FROM:

Alex Traska, Chemist

Product Science Branch, CT Team

Antimicrobials Division (7510C)

THRU:

Karen P. Hicks, CT Team Leader

Product Science Branch

Antimicrobials Division (7510C)

THRU:

Michele E. Wingfield, Chief

Product Science Branch

Antimicrobials Division (7510 C)

BACKGROUND:

This re-submission in support of the new product registration, for the subject hard surface disinfectant spray, was submitted by John W. Kennedy

Consultants, Inc. on behalf of the registrant, ETI H2O, Inc.

The registrant, in this re-submission, is responding to the May 10, 2000 Agency letter in which specific revisions and corrections were requested to the CSF and label.

The following documents were submitted and examined in the chemistry review of this submission: agent's cover letter dated June 16, 2000, revised Basic Formulation CSF dated 6/23/00, product label dated 10/10/00 by the reviewer, Product Chemistry Data Series 830 covering determinations of color, pH, physical state, odor, density and accelerated stability studies.

FINDINGS:

- 1. The 830 Test Guideline Series covering test protocols for color, pH, physical state and density of **Axen** were acceptable.
- 2. The Accelerated Storage Stability Study covering this product was also complete and acceptable.
- 3. The amount of silver given in item 13 a of the CSF is not consistent with the percentage of the silver shown in item 13b. This inconsistency must be resolved.
- 4. Item 17 of the CSF was not completed as required.
- 5. The nominal concentration of 0.0010% for silver given in item 13b of the CSF does not agree with the label declaration of 0.0012%.
- 6. Citric acid at a 4.8% level in the formulation cannot be justified as merely a stabilizing agent, for 12 ppm of silver ion. At this concentration, citric acid has well established antibacterial properties, and as such must be identified and declared as an active ingredient. (If this is not the case placed support your partially production).
- 7. It is suggested that the Axen Basic CSF be written to show both the starting materials which include Axenohl and the final composition of Axen, on dilution of Axenohl with and citric acid.

RECOMMENDATIONS:

THE STA

This re-submission, in support of the new product registration of \mathbf{Axen} , is not accepted.

Deficiencies noted under Findings must be addressed by the registrant.

10/10/00 AT

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs

ETI H20 RT. 14, BOX 1517 LAKE CITY, FL 32054

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your transmittal of 07/07/00. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

We are unable to accept your data submittal for further processing and review, because of the significant deficiencies noted below. It is being returned to you for correction. If deficiencies were found which apply to your overall submission, they are described immediately following this paragraph. If problems are found with individual studies, they are described below linked to the study identifier found on the enclosed copy of your bibliography.

Rejected study [01] :

A statement of compliance or non-compliance with the Good Laboratory Practices Standards contained in 40 CFR160 is required for all studies (except range finding studies and supplements to previously submitted studies) submitted to EPA. This statement must appear as page 3 of all studies, and must be signed and dated by the study sponsor, the study submitter, and the study director. Please see 40 CFR 160.12 for specific guidance.

Rejected study [02] :

A statement of compliance or non-compliance with the Good Laboratory Practices Standards contained in 40 CFR160 is required for all studies (except range finding studies and supplements to previously submitted studies) submitted to EPA. This statement must appear as page 3 of all studies, and must be signed and dated by the study sponsor, the study submitter, and the study director. Please see 40 CFR 160:12 for specific

guidance.

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171

John W. Kennedy Consultants

13 °C" Street Suite G Laurel, MD 20707 Phone: (301) 490-1600 Fax: (301) 490-5793

E-MAIL: JohnKennedyConsultants@hotmail.com

August 2, 2000

Front End Screen (PR 86-5)
Antimicrobial Division (T7505C)
Office of Pesticide Programs
Environmental Protection Agency
Crystall Mall No. 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Subject: AXEN - EPA File Symbol 72977-E

This is a resubmission based on your letter of July 12, 2000.

John W. Kennedy

r i i



IOHN W. KENNEDY CONSULTANTS, INC.

13 101 Street, Sent G. Durtt, MO 29707 Teterhoke: (301) 490-1800, FAX. (301) 490-5790

Dec. 9, 1999

450189-00

Marshall Swindell Product Manager 33 Antimicrobial Biogram Division (H7505C) U.S> Environmental Protection Agency Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA. 22202

Subject: New Registration For AXENOHL Technical Product For Formulation of AXEN Company Number 72977 - 2

Dear Marshall,

John W. Kennedy Consultants represents ETI H20 in all matters dealing with pesticide and Food and Drug clearances.

Attached are the following data to support both the technical (AXENOHL) and the formulated product (AXEN):

Application for Pesticide

- (2) Certification with Respect to Citation of Data
- (3) Proposed Label
- (4) Data Matrix
- (5)Data Submissions
- (6) Confidential Statement of Formula Please note that ETT H2O is going the Selective Method. The Data Matrix for the two products and one toxicology study is all that separate the two submissions Except for Chemistry.

We beleive that these two submissions qualify for "FAST TRACK".

- LACUTE CIFF TOXICITY
- 2. Acute Dermal . Toxicity 45016902
- & Primary Eye Incitation 45016903
- 4 Primary SKIN Irritation 45016904
- s. Dermal Sensitization 45016905
- c. Product Identity & Composition Reject

45016901

? DISINFECTION EFFICACY Reject

MADAC USE Dilution 45016906

Primary Eye Irritation Study in Rubbits 4501650 Product chentity and Composition 46016502

CODING FORM FOR APPLICATIONS FOR REGISTRATION/AMENDMENTS

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This is an ACCEPTED submission.

One copy of the PPC diagnosis and one copy of the annotated bibliography are provided for your files. The PPC has already mailed out the submitter's copy of the two documents.

This is a PARTIALLY ACCEPTED/COMPLETELY REJECTED submission.

A copy of the PPC diagnosis and the annotated bibliography are provided for your files. A second copy is provided for your use in corresponding with the data submitter.

[189-KL]

Al return this package to the consultant

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| | material not included contains the following type of mation: |
| | Identity of product inert ingredients. |
| : | Identity of product impurities. |
| | Description of the product manufacturing process. |
| | Description of quality control procedures. |
| | Identity of the source of product ingredients. |
| | Sales or other commercial/financial information. |
| | A draft product label. |
| | The product confidential statement of formula. |
| | Information about a pending registration action. |
| | FIFRA registration data. |
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JOHN W. KENNEDY CONSULTANTS, INC.



13 °C1 STREET, SUITE G. LAUREL, MD '20707 TELEPHONE! (301) 480-1600, FAX: (301) 490-5793

Dec. 9, 1999

450169-00

Marshall Swindell Product Manager 33 Antimicrobial Biogram Division (H7505C) U.S> Environmental Protection Agency Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA. 22202

Subject: New Registration For AXENOHL
Technical Product For Formulation of AXEN
Company Number 72977 - 2

Dear Marshall,

John W. Kennedy Consultants represents ETI H2O in all matters dealing with pesticide and Food and Drug clearances.

Attached are the following data to support both the technical (AXENOHL) and the formulated product (AXEN):

(1) Application for Pesticide

- (2) Certification with Respect to Citation of Data
- (3) Proposed Label
- (4) Data Matrix
- (5) Data Submissions

(6) Confidential Statement of Formula. Please note that ETI H2O is going the Selective Method. The Data Matrix for the two products and one toxicology study is all that separate the two submissions except for Chemistry.

We beleive that these two submissions qualify for "FAST TRACK".

Best regards,

John W. Kennedy

. Acute Oral Toxicity 45016901

2. A cute Dermal Toxicity 45016902

\$ Primary Eye Irritation 45016903

4 Primary SKIN Irritation 45016904

s. Dermal Sensitization 45016905

· Product Identity & Composition Reject (06)

7 DISINFECTION Efficacy Reject (07).

PADAC Use Dilution 45016906

AXEN - E Primary Eye Irritation Study in Rubbits 46016501 Product elentity and Composition 46016502

| name and another of subsects: FTLH20 |
|---|
| Rt. 14, Box 1517 |
| LOKE City FL 32054 |
| |
| REGULATORY ACTION: EPA File Symbol 72977-E (AXPM) |
| TRANSMITTAL DATE: (See File Symbol 72977-R for Storage Stubility) |
| LIST OF SUMMITTED STUDIES: |
| (JECT (DI) VOLUME 1 - Determination of Color, pH, Physical State |
| Odorand Density of AXEN: |
| NETECT(02) VOLUME 2 - Accelerated Storage Stability of |
| Mrio No. AXFNOHL and AXEN |
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| |
| |
| COMPANY OFFICIAL: John W. Kennedy July Chamiery TYPED NAME SIGNATURE |
| CONDANY NAME: John W. Kennedy Consultants |
| COMPANY CONTACT: John W. Kennedy (301) 490-1600 TYPED NAME (301) 490-1600 |

44. The

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs

ETI H20 RT. 14, BOX 1517 LAKE CITY, FL 32054

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your transmittal of 07/07/00. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

We are unable to accept your data submittal for further processing and review, because of the significant deficiencies noted below. It is being returned to you for correction. If deficiencies were found which apply to your overall submission, they are described immediately following this paragraph. If problems are found with individual studies, they are described below linked to the study identifier found on the enclosed copy of your bibliography.

Rejected study [01] :

A statement of compliance or non-compliance with the Good Laboratory Practices Standards contained in 40 CFR160 is required for all studies (except range finding studies and supplements to previously submitted studies) submitted to EPA. This statement must appear as page 3 of all studies, and must be signed and dated by the study sponsor, the study submitter, and the study director. Please see 40 CFR 160.12 for specific quidance.

Rejected study [02] :

A statement of compliance or non-compliance with the Good Laboratory Practices Standards contained in 40 CFR160 is required for all studies (except range finding studies and supplements to previously submitted studies) submitted to EPA. This statement must appear as page 3 of all studies, and must be signed and dated by the study sponsor, the study submitter, and the study director. Please see 40 CFR 160.12 for specific

guidance.

188

| | is not included in this copy. s through 65 are not included in this copy. |
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| | material not included contains the following type of mation: |
| | Identity of product inert ingredients. |
| | Identity of product impurities. |
| | Description of the product manufacturing process. |
| | Description of quality control procedures. |
| _ | Identity of the source of product ingredients. |
| _ | Sales or other commercial/financial information. |
| _ | A draft product label. |
| _ | The product confidential statement of formula. |
| _ | Information about a pending registration action. |
| _ | FIFRA registration data. |
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15 101 Stesst, Suits G, Шеякі, МВ/20707 Тацеанова: (301) 490-1660, FAX: (301) 490-3793

Dag. 9, 1995

450159-00

Marshall Swindell Product Manager 33 Antimicrobial Biogram Division (H7505C) U.S> Environmental Protection Agency Crystal Mall 2 -1921 Jefferson Davis Highway Arlington, VA. 22202

Subject: New Registration For AXENOHL
Technical Product For Formulation of AXEN
Company Number 72977 - 2

Dear Marshall,

John W. Kennedy Consultants represents ETI H2O in all matters dealing with pesticide and Food and Drug clearances.

Attached are the following data to support both the technical (AXENOHL) and the formulated product (AXEN):

(1) Application for Pesticide

- (2) Certification with Respect to Citation of Data
- (3) Proposed Label
- (4) Data Matrix
- (5). Data Submissions
- (3) Confidential Statement of Formula Please note that ETI H2O is going the Selective Method. The Data Matrix for the two products and one toxicology study is all that separate the two submissions except for Chemistry.

We beleive that these two submissions qualify for "FAST TRACK".

Best/regards,

John W. Kennedy

"Acute Cital Toxicity

45016901

A. Acore Dermal Toxicity 45016902

· Primary Eye Irritation 45018903

4. Primary SKIN Irritation 45016904

s. Dermal Sensitization 45016905

r. Product Identity & Composition, Reject (06)

7 DISINFECTION Efficacy Reject (07)

7. AOAC USE DILUTION 45016906

AXEN - E Primary Eye Irritation Study in Rubbits Product claentity and Composition

46016501 46016502

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| Pt 14, Box 1517 |
| Loke City FL 32054 |
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| REGULATORY ACCESS. EPA File Symbol 72977-E (AXYM) |
| TRANSMITTAL DATE: (See File Symbol 72977-R for Storage Stubility) |
| LIST OF SURVICTED STUDIES: |
| () JECT (DI) volume : - Determination of Color, pH, Physical Sinte |
| Odor and Density of AXEN: |
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| VEJECT(02) VOLUME : - Accelerated Storage Stability of AXENOHL and AXEN |
| ANIMUTE COMO MANAGEMENTO |
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| CONSTRUCTORES John W. Kennedy but in beminding |
| TYPED NAME SIGNATURE |
| COMPANY NEME: _ John W. Kennedy Consultants |
| ZOMI WITHOUT MENNERY CONSULTERY |
| COMPANY CONTACT: John W. Kennedy (301) 490-1600 TYPED NAME TELEPHONE |
| |
| |

Administrative

Materials

ATTACHMENT #1 # 2

THIS IS NOT A DATA SUBMISSION, ONLY CLARIFICATION OF PREVIOUSLY SUBMITTED DATA REQUESTED BY THE EPA

SEE ATTACHED LETTER (Dated 5/26/00)
TO MARSHALL SWINDEL
FROM DR. ED WILLSON.

| _ | is not included in this copy. $\frac{190}{190}$ through $\frac{190}{190}$ are not included in this copy. |
|-------------|--|
| | aterial not included contains the following type of mation: |
| · | Identity of product inert ingredients. |
| | Identity of product impurities. |
| | Description of the product manufacturing process. |
| | Description of quality control procedures. |
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| | FIFRA registration data. |
| | The document is a duplicate of page(s) |
| | The document is not responsive to the request. |
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| | formation not included is generally considered confidentia |

ATTACHMENT #3

LABELS FOR AXEN AND AXENOHL



AXEN ® Disinfectant Pump Spray Kills Viruses and bacteria on environmental surfaces in your home and public places. It eliminates germs and odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN ® Disinfectant Spray:

in empty garbage cans.

In diaper pails

In pet areas

In empty hampers

In sick rooms

On doorknobs

Under sinks

Around toilet areas

Fast/Easy/Effective: Use on finished surfaces in basements, closets, attics, laundry rooms, storage areas, vacation homes, boat interiors, shower stalls and recycling bins. Excellent for controlling mold and mildew on mattresses, pillows and shower curtains.

Bacteria and Fungi:

Viruses:

Staph and Strep

Rhinovirus (the leading cause of the common cold)

Salmonella

Rotavirus (the leading cause of infectious diarrhea in children)

E. Coli

Respiratory Syncytial Virus (the leading cause of lower

respiratory infections in children)

Campylobacter

Poliovirus Type 1 - Adenovirus type 2

Athlete's foot fungus

Herpes simplex Virus types 1 & 2 - Hepatitis A

Ingredients

Active Ingrediants:

* Silver

0.0012 %

Inert ingrediants

99,9988 %

Total:

100.0000 %

KEEP OUT OF REACH OF CHILDREN
PRECAUTIONARY STATEMENTS:
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmfull if swallowed. Avoid contact with eyes. Wash thoroughy with soap and water after handling, Avoid contamination of food and feed. Do not leave package where children and animals may gain access.

STATEMENT OF PRACTICAL TREATMENT

IF IN EYES, flush with plenty of water. Get medical attention if irritation persists.

IF ON SKIN, wash with soap and water. Get medical attention if irritation persits,

^{*} electrolytically generated Silver ions



AXEN ® Disinfectant Pump Spray Kills Viruses and bacteria on environmental surfaces in your home and public places. It eliminates germs and odors on hard nonporous surfaces that you come in contact with everyday. Use AXEN ® Disinfectant Spray:

In empty garbage cans

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Inert ingrediants

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Total:

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respiratory infections in children)

Campylobacter

Poliovirus Type 1 - Adenovirus type 2

Athlete's foot fungus

Herpes simplex Virus types 1 & 2 - Hepatitis A

Ingredients

Active Ingrediants:

Inert ingredients

* Silver

0.0012 % 99,9988 %

Total:

100,0000 %

KEEP OUT OF REACH OF CHILDREN PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

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IF ON SKIN, wash with soap and water. Get medical attention if irritation persits.

electrolytically generated Silver ions

ATTACHMENT #4

CONFIDENTIAL
STATEMENTS OF
FORMULA FOR

AXEN

AXENOHL

MAY 1.0 2008 (

SUBMISSION BAR CODE # 5574918 REVIEWER P Hasty

CODING FORM FOR APPLICATIONS FOR REGISTRATION/AMENDMENTS

| file symbol/reg no. 7 descriptor New 2 | | | 33 AC | CTION CODE | 188 |
|--|----------------|--------------|-------------|---|---------------------------------------|
| [] CHILD RESISTA | Y PACKAG | [] | | DENTIAL US | E ONLY |
| REGISTRATION TYPE | : [] co | DADITIONAL | | UNCONDITIO | NAL . |
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MAY | 0 2000

ETI H2O, Inc. Route 14, Box 1517 Lake City, FL 32054

Attn.:

John Kennedy, Agent

Subject:

AXEN

EPA File Symbol 72977-E

Application Dated November 28, 1999

The application referred to above submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is incomplete. Before the agency can continue processing your application you must satisfy the deficiencies listed below.

- 1. Refer to the attached Product Chemistry Science Review for data deficiencies. Corrections and clarifications must be made on the Confidential Statement of Formula form, and in the declaration of the appropriate active ingredient. As discussed by phone with the company representative, silver citrate may be a new chemical, but a final determination will be held in abeyance until the agency has met with the company to discuss the chemistry of the product.
- 2. Refer to the attached Product Toxicity Science Review for data deficiencies. The submitted primary eye irrit6iation study is acceptable; however, the application package make no mention of the other acute

| CONCURRENCES | | | | | | | |
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| TE) | | | | | | | |
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toxicity data requirements. Data support for each must be submitted. As discussed by phone with the company representative, additional toxicity data, environmental fate, ecological effects, efficacy, and exposure data will also be required if the active ingredient is determined to be a new pesticide active ingredient.

The agency reserves a full label review until after the above deficiencies have been satisfied.

If you have any questions concerning this letter please contact Marshall Swindell at 703-308-6341.

442 3

Sincerely yours,

Marshall Swindell Product Manager 33 Regulatory Management Branch 1 Antimicrobials Division (7510C)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20450

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

05/08/00

MEMORANDUM

Subject:

D263138

AXEN®, EPA File Symbol 72977-E

From:

Wallace Powell, Biologist /

Product Science Branch /

Antimicrobials Division (7510C)

Thru:

Karen P. Hicks, Team Leader

Chemistry/Toxicology Team Product Science Branch

Antimicrobiats Division (7510C)

Michele E. Wingfield, Chief Product Science Branch

Antimicrobials Division (7510C)

To:

Marshall Swindell, Product Manager, Team 33

Regulatory Management Branch I Antimicrobials Division (7510C)

BACKGROUND

In an application for registration of AXEN®, EPA File Symbol 72977-E, the applicant, ETI H2O, Inc. (as represented by an agent), has submitted a primary eye irritation study, MRID 450165-01. The product label is labeled as a hard surface disinfectant spray containing the active ingredients Axenohl® (0.0012% of the formulation by weight) and

RECOMMENDATION

The submitted primary eye irritation study, MRID 450165-01, is acceptable and places AXEN in acute toxicity Category:IV for eye irritation.

The application package makes no mention of the other acute toxicity data requirements – acute oral toxicity, acute dermal toxicity, acute inhalation toxicity, primary dermal irritation, and dermal sensitization. Data support for each must be

submitted. Data support can be direct (submitted studies, which is generally the recommended approach) or indirect (cited or submitted studies, or waiver requests with specific rationales).

Based on the final component entry in the Confidential Statement of Formula (CSF) dated 11/28/99, it appears as if Axenohl® is the product, which contains However, the label implies that Axenohl® is merely a component of the product. (The reviewer assumes that that CSF entry refers to a process whereas the rest of the CSF represents the final product.) PSB will need clarification on this matter if acute toxicity data waivers are requested, or if studies are cited which were conducted on other products.

PRODUCT LABELING

Determination of the required precautionary (human hazard) and first-aid (practical treatment) label statements cannot be completed until the acute toxicity data requirements have all been met.

PARKER FOR THE DESIGNATION OF PROBLEMS OF THE PARKET AND A SERVICES A

24

DATA REVIEW FOR PRIMARY EYE IRRITATION TESTING

Reviewer: W. Powell Product No.: 72977-E DP Barcode: D263138 MRID No.: 450165-01

Report No.: 8115 (Study No.) Study Completion: 10/06/99 Author: George E. Moore

Conclusion:

Toxicity Category: IV Classification: Acceptable

Quality Assurance (40 CFR §160.12): Included

Procedure Deviations: None noted

Testing Facility: Product Safety Labs

725 Cranbury Road, East Brunswick, NJ 08816

Test Material: AXEN, Lot #8995A, a clear liquid

Test Animal:

Rabbit, New Zealand albino

Age: Adult

Weight: Not indicated

Source: Davidson's Mill Farm, South Brunswick, NJ

Test Method:

0.1 mL of the undiluted test material was instilled into the conjunctival sac of one eye of each of three rabbits (1 female, 2 males) that were pre-screened for health and for eye abnormalities. Upon instillation, eyelids of the treated eyes were held together for approximately 1 second. The untreated eye served as a control. Ocular irritation was evaluated and graded according to the Draize criteria, at 1, 24, 48, and 72 hours post-instillation. Fluorescein solution was employed at 24 hours to verify absence of corneal opacity.

Results and Discussion:

No 'positive' conjunctival irritation, corneal opacity, or iridal involvement was observed during the study. Irritation was limited to conjunctival redness of grade 1 (i.e., vessels injected above normal) in 2/3 animals at 1 hour post-instillation. This cleared by the 24 hour observation. All animals appeared active and healthy. The data place the test material in acute Toxicity Category IV for eye irritation.

215



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: Product Chemistry Review of Axen

DP Barcode: **D263136**

Reg. No. or File Symbol: 72977-E

Manufacturing-use []

End-use Product [X]

Active Ingredient Composition:

*Axenohl......0.0012%

*Silver citrate generated electrically

TO:

Marshall Swindell PM 33

FROM:

Alex Traska, Chemist

Product Science Branch, CT Team Antimicrobials Division (7510C)

THRU:

Karen P. Hicks, CT Team Leader

Product Science Branch

Antimicrobials Division (7510C)

THRU:

Michele E. Wingfield, Chief

Product Science Branch

Antimicrobials Division (7510 C)

BACKGROUND:

This application for a new product registration, for the subject disinfectant spray, was submitted by John W. Kennedy Consultants, Inc. on behalf of the registrant, ETI H2O, Inc.

In support of the new registration for Axen a hard surface disinfectant spray, the following documents were submitted and examined in the chemistry review of this submission: agent's cover letter (date missing), Basic Formulation CSF dated 11/28/99, product label dated 1/11/00, Product Chemistry Data-Guidelines 61, 62 and 63. Also examined for this review was pending jacket file #72977-E.

FINDINGS:

- 1. The following deficiencies were noted in the review of the CSF:
 - a. Item 1 and 2 of the CSF were incomplete
 - b. provide source of supply for all components utilized in the formulation as required in item 11
 - c. CAS Reg. Nos. should be provided for all components used in the formula as required in item 10
 - d. the CAS Reg. No. for citric acid is 77-92-9 and not 126-45-4 as given in the CSF
- 2. should, therefore, not be listed in the ingredient statement as an active ingredient.
- 3. The use of 4.8% citric acid in the formulation as a dispersant for silver citrate is questioned since silver citrate is only present at a 0.0012% level.

 It appears that the primary effect of citric acid in the formulation is that of an active ingredient. At a 4.8% level citric acid should be treated as an active ingredient since at this level it provides significant germicidal properties to the formulation.
- 4. The registered trade mark "Axenohl " cannot be used in the active ingredient declaration. The common chemical name must be used in the declaration of ingredients e.g. silver citrate.
- Based on the prior comments, the requirements of PR Notice 91-2 have not been satisfied.
- 5. The active ingredient, silver citrate, is not for use in pesticide formulations. A MSDS including a complete chemical characterization of the active ingredient must be provided to initiate the clearance of silver citrate by the Agency.

STATE OF BUILDING

- 6. The following deficiencies were noted in the review of the Product Chemistry Data package:
 - a. test parameters for pH were not provided e.g. percent concentration of test solution, temperature
 - b. no initial 30 day storage stability study was provided and the one-year study is still outstanding
 - c. it is not clear from the discussion of the manufacturing process whether the disinfectant spray is a propellant driven aerosol spray or a pump spray

RECOMMENDATIONS:

This application, for the new product registration of **Axen**, is not accepted. Deficiencies noted under Findings must be corrected and all additional information requested must be provided for further Agency review.

3/31/00 AT



13 °C1 Stasst, Suits G. Lautsu, MD 20707 Talsahons: (301) 49040500, FAR: (301) 49048790

450165-00

Marshall Swindell Product Manager 33 Antimicrobial Biogram Division (H7505) U.S. Environmental Protection Agency Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA. 22202

Subject: New Registration For AXEN Company Number 72977-E

Dear Marshall,

John W. Kennedy Consultants represents ETI H2O in all matters dealing with pesticide and Food and Drug clearances.

Support for the subject product is attached to the application for AXEMOHL (technical) except chemistry and one toxicology study(Primary Eye Irritation in Rabbit).

The following data are attached to this submission:

- Application for Pesticide
- (2) Certification with Respect to Citation of Data
- (3) Confidential Statement of Formula
- (4) Proposed Label
- (5) Data Matrix
- (6) Data Submissions

AND SEA

Please note that ETI H2O is going the Selective Method.

best regards,

Kohn W. Kennedy

TRANSMITTAL DOCUMENT

| NAME AND ADDRE | SS OF SUBMITTER: ETI H20 |
|----------------|---|
| • | Tre 19, Box 1517 |
| | Lake Ci+4, FL 32054 |
| • | |
| REGULATORY ACT | ION: NEW Application - Axen pagel |
| | IE: 11-28-99 |
| LIST OF SUBMIT | , |
| 45016501 | VOLUME 1 - Primary Eye Irritation Study |
| Mrid No. | in Rubbits |
| 45016502 | NOWME 2 - Droduct Identity and Composition - Among |
| Mrid No. | |
| | VOLUME 3 - |
| Mrid No. | |
| | VOLUME 4 - |
| Mrid No. | |
| | TENT COMMENTS COMMENTS OF THE PROPERTY OF THE |
| Mrid No. | VOLUME 5 - |
| COMPANY OF | FFICIAL: John (s) Kennedy July Signature |
| COMPANY NA | ME: ETIH20 (Consultant) |
| COMPANY CC | WIACT: John W. Kennedy (301) 490-1600 TYPED NAME Kennedy Gasultants |
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Lourel, MO 20707 |

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| | material not included contains the following type of rmation: |
| | _ Identity of product inert ingredients. |
| | Identity of product impurities. |
| | Description of the product manufacturing process. |
| | Description of quality control procedures. |
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| | Sales or other commercial/financial information. |
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| | Information about a pending registration action. |
| _ | FIFRA registration data. |
| _ | The document is a duplicate of page(s) |
| _ | The document is not responsive to the request. |
| | |

U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs

ETI H20 RT. 14, BOX 1517 LAKE CITY, FL 32054

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your transmittal of 01/11/00. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.



13 101 Street, Syste G. Lauret, MD 20707 Teterhone: (301) 490-1800, FAX: (301) 490-5793

450165 - 00

Marshall Swindell Product Manager 33 Antimicrobial Biogram Division (H7505) U.S. Environmental Protection Agency Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA. 22202

Subject: New Registration For AXEN Company Number 72977-E

Dear Marshall,

John W. Kennedy Consultants represents ETI H2O in all matters dealing with pesticide and Food and Drug clearances.

Support for the subject product is attached to the application for AXEMOHL (technical) except chemistry and one toxicology study(Primary Eye Irritation in Rabbit).

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- (2) Certification with Respect to Citation of Data
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- (5) Data Matrix
- (6) Data Submissions

Please note that ETI H2O is going the Selective Method.

Best regards,

Xohn W. Kennedv

TRANSMITTAL DOCUMENT

| NAME AND ADDRI | ESS OF SUBMITTER: | ETI H20 |
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| | | Tre 19, Box 1517 |
| | | Lake City, FL 32054 |
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| REGULATORY ACT | TION: New Apr | lication - Axen page 1 |
| | ate: 11-3-8-1 | , |
| LIST OF SUBMIT | TED STUDIËS: | |
| 45016501 | VOLUME 1 - Prin | mary Eye Irritation Study |
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| 45016502 | | act Identity and Composition Arren |
| Mrid No. | | |
| | VOLUME 3 - | |
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| | VOLUME 4 - | |
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| | VOLUME 5 - | |
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| COMPANY O | FFICIAL: Jó | hn (s) hennedy Signature |
| | 7-7 | |
| COMPANY N | AME: E | TI H20 (Consultant) |
| . COMPANY O | WITHOUT . | hn W. Kennedy (30) 490-1600 |
| COMPANY C | | (PED NAME) TELEPHONE |
| | Kei | nuedy Consultants |
| | 13 | "C" St., Saite G |
| | Lai | "C" St., Saite G
urel, mo 20707 |
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DP BARCODE: D263136

CASE: 068118 DATA PACKAGE RESUBMISSION: S574918 BEAN SHEET

DATA PACKAGE RECORD

DATE: 02/10/00

Page 1 of 1

* * * CASE/SUBMISSION INFORMATION * * *

CASE TYPE: REGISTRATION ACTION: 188 FQPA-OC-ME TOO ADDL USE

CHEMICALS:

0.0010%

ID#: 072977-E AXEN

COMPANY: 072977 ETI H2O, INC.

PRODUCT MANAGER: 33 MARSHALL SWINDELL 703-308-6341 ROOM: CS1 6B 703-308-7933 ROOM: CS1 6W15 PM TEAM REVIEWER: PAMELA HASTY

RECEIVED DATE: 01/11/00 DUE OUT DATE: 05/10/00

* * * DATA PACKAGE INFORMATION * * *

DP BARCODE: 263136 EXPEDITE: N. DATE SENT: 02/10/00 DATE RET.: / / Contract States

CHEMICAL:

~P TYPE: 001

CSF: Y LABEL: Y

ASSIGNED TO DATE IN DATE OUT ADMIN DUE DATE: 05/15/00 NEGOT DATE: / / DIV : AD / / / / BRAN: PSB PROJ DATE: SECT: CTT

REVR : CONTR:

* * * DATA REVIEW INSTRUCTIONS * * *

Please review the chemistry data for acceptability.

* * * DATA PACKAGE EVALUATION * * *

No evaluation is written for this data package

* * * ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION * * *

DP BC BRANCH/SECTION 263138 PSB/CTT DP BC DATE OUT DUE BACK INS CSF LABEL . 02/10/00 05/15/00 . Y Y Y

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FRONT END PROCESSING APPLICATION INFORMATION CHECK

| DATE: 4/13/00 | | |
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| PM <u>33</u> | | |
| EPA COMPANY NUMBER 72977-E | | |
| EPA REGISTRATION NUMBER STATUS (For Amendments) | Active | Cancelled |
| | Not in RE | EFS |
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| "Me-Too" CITED PRODUCT STATUS | Active | Cancelled |
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"Me Too" App
Other - Explain | plication. | 988 10 | |
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

· 01/13/2000

OFFICE OF PREVENTION, PESTICIDE AND TOXIC SUBSTANCES

ETI H20 Route 14, Box 1517 Lake City, FL 32054

PRODUCT NAME: Axen
COMPANY NAME: ETI H20

OPP IDENTIFICATION NUMBER: 256680

EPA FILE SYMBOL: 72977-E EPA RECEIPT DATE: 01/11/2000

SUBJECT: RECEIPT OF APPLICATION FOR A NEW REGISTRATION

DEAR REGISTRANT:

The Office of Pesticides Programs has received your application for a new registration and it has passed an administrative screen for completeness.

Please note that this is only a notification of receipt of your application. This is only the first step in the application process, and does NOT constitute approval.

If you have any questions please contact Marshall Swindell, Product Manager 33, at (703)-308-6341.

Sincerely,

Front End Processing Staff Information Services Branch

Information Resources & Services Division





JOHN W. KENNEDY CONSULTANTS, INC.

13 °C" STREET, SUITE G. LAUREL, MD 20707 TELEPHONE: (301) 490-1600, FAX: (301) 490-5793

Marshall Swindell Product Manager 33 Antimicrobial Biogram Division (H7505) U.S. Environmental Protection Agency Crystal Mall 2 1921 Jefferson Davis Highway Arlington, VA. 22202

Subject: New Registration For AXEN Company Number 72977-E

Dear Marshall,

John W. Kennedy Consultants represents ETI H2O in all matters dealing with pesticide and Food and Drug clearances.

Support for the subject product is attached to the application for AXEMOHL (technical) except chemistry and one toxicology study(Primary Eye Irritation in Rabbit).

The following data are attached to this submission:

- (1) Application for Pesticide
- (2) Certification with Respect to Citation of Data
- (3) Confidential Statement of Formula
- (4) Proposed Label
- (5) Data Matrix
- (6) Data Submissions

Please note that ETI H2O is going the Selective Method.

Best regards

of a Lineary

John W. Kennedy

JOHN W. KENNEDY CONSULTANTS, INC.



13 °C' Staget, Suite G. Lauret, MO 20707 Telephone: (301) 490-1600, FAX: (301) 490-5793

Mr. Marshall Swindell Product Manager 33 Antimicrobial Biogram Branch Registration Division (H7505C) Enviromental Protection Agency Crystal Mall No. 2 1921 Jefferson Davis Highway Arlington, VA. 22202

Subject: New Registration For AXEN and AXENOHL

Company number 72977

Dear Marshall,

AXEN is a end-use product formulated by the dilution of AXENOHL (technical product).

Axenobl® is a combination of electrolytically generated silver, stric acid and

Registration is being sought from EPA for use as a hard surface disinfectant. Many organisms are controlled at dilute (<12 ppm Ag+ or less) including Salmonella cholerasuis, Pseudomonas aeruginosa, Staphylococcus aureus, and Enterococcus faecium. Enterococcus faecium was tested as a surrogate for drug resistant (i.e. Vancomycin Resistant Enterococcus, (VRE)) bacteria.

Axenohl® is not a colloidal preparation of silver, but is an organic acid/silver complex. Without the organic acid, silver is neither as effective nor as stable. The acid maintains stability and solubility.

Toxicity studies have been done in conjunction with the EPA submission. The results are as follows for Axenohl®, the technical concentrate (ca. 2,400 ppm Ag+):

Acute Oral Toxicity LD₅₀>5,000 mg/Kg
 Acute Dermal Toxicity LD₅₀>5,000 mg/Kg
 Dermal Sensitization Not a contact sensitizer

Ocular Irritation Mildly irritating. Irritation cleared by 72 hours. Category 3.

5. Dermal Irritation Slightly irritating at 72 hours.

For the diluted product, Axen®, at proposed use level concentrations (ca. 12 ppm Ag+):

I. Ocular Irritation Practically non-irritating. Irritation cleared by 24 hours.

Category 4.

These results indicate that Axenohi® and Axen® are non-toxic and can even be used in the eye with little problem. Neutralization for eye uses would likely reduce the irritation even more.

Silver and silver compounds central over 650 different microbes, i.e. bacteria and fungi as cited

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by the National Academy of Sciences.

John W. Kennedy
John W. Kennedy Consultants, Inc.
Agent for ETI H2O

1_ :-

Disinfection With Environmental Perspective

ET1 mo. Inc. Rt. 14 Box 1517, Lake City, Fl 32024 V. 904-755-0389 FAX: 904-755-8642 E-Mail: microbio@alltel.net

Date: 10-18-99

To Whom it may concern:

ETI H20, Inc. authorizes John W. Kennedy Consultants, Inc. of 13 "C" Street, Suite G, Laurel, MD 20707 to act on behalf of ETI H20, Inc. on all matters relating to regulatory actions before the US Environmental Protection Agency, the Food and Drug Administration and the State Regulatory Authorities.

Sincerely:

Andrew B: Arata President and CEO

Cc: Dr. Edwin Woolson, EPL-BAS



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 40! M Street, S.W. WASHINGTON, D.C. 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 1.25 hours per response for registration and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send comments regarding burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE information Management Division (2.137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460.

| information Management Division (2137), U.S. Environmental Protection Ages
To not send the completed form to this address. | ncy, 401 M Street, 5.W | ., Washington, DC 20460. |
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| Certification with Re | | |
| ETT H20. Route 14, Box 1517, Lake City, FL. (301) 4 | ltant(John Ken
190-1600 | MATERA Registration Number/File Symbol 72977 - E |
| Scive Ingredient(s) and/or representative test compound(s) Sciver Citrate | | Date 11/28/99 |
| General Use Pattern(s) (first all those claimed for this product using 40 CFR Pa
Guideline 91-2 Surface dissinfectants | | Product Name AXEN |
| NOTE: if your product is a 100% repackaging of another purchased EPA-resubmit this form. You must submit the Formulator's Examption Statement (EPA | egistered product labele
A Form 8570-27). | d for all the same uses on your label, you do not need to |
| I am responding to a Data-Call-In Notice, and have included with this fibe used for this purpose). | form a list of companies | sent offers of compensation (the Data Matrix form should |
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| I carrify that this application for registration, this form for reregistration, plication for registration, the form for reregistration, or the Data-Call-In responsibility of in Section I, this application is supported by all data in the Agency's files the lifty similar product, or one or more of the ingredients in this product; and quite nents in effect on the date of approval of this application if the application es . | or this Data-Call-In reset. In addition, if the cites that (1) concern the part (2) is a type of data the sought the initial registr | e-all option or cite-all oplion under the selective method is roperties or effects of this product or an identical or at would be required to be submitted under the data ration of a product of identical or similar composition and |
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| valure John Comosky | Date
11/28/99 | Typed or Printed Name and Title John W. Hennedy - Consultant |

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NOTE

It shall be unlawful--for any person to use for the person's own advantage or to reveal, other than to the Administrator, or officials or employees of the Environmental Protection Agency or other Federal executive agencies, or to the courts, or to physicians, pharmacists, and other qualified persons, needing such information for the performance of their duties, in accordance with such directions as the Administrator may prescribe, any information acquired by authority of the "Federal Insecticide, Fungicide, and Rodenticide Act" which is confidential under this Act.

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